



# International Labour Conference

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NINETEENTH SESSION  
GENEVA, 1935

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## REDUCTION OF HOURS OF WORK

with special reference to:

- (a) Public Works undertaken or subsidised by Governments;
- (b) Iron and Steel; (c) Building and Contracting;
- (d) Glass Bottle Manufacture; (e) Coal Mines

Item VI on the Agenda

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**Vol. II: Iron and Steel**

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# INTERNATIONAL LABOUR OFFICE

GENEVA, SWITZERLAND

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Item VI on the Agenda

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**Vol. II: Iron and Steel**

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## INTRODUCTION

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The various stages in the discussion of the question of the reduction of hours of work up to the date of the Eighteenth (1934) Session of the International Labour Conference have been set out in previous Reports of the International Labour Office <sup>1</sup>. It is not necessary here, therefore, to give more than a brief statement of the proceedings of the Eighteenth Session of the Conference and of the circumstances in which the question has again been placed on the Agenda of the Nineteenth Session

The Eighteenth Session of the Conference, which met in June 1934, had before it a Report submitted by the Office containing the replies of the Governments of the States Members of the Organisation to a Questionnaire framed in accordance with decisions of the previous Session and the texts of two proposed Draft Conventions, drawn up by the International Labour Office and relating respectively to industry and to commerce and offices. In presenting these texts, the Office drew the attention of the Conference to certain difficulties it had experienced in framing them. These difficulties were due to the fact that the Report had had to be prepared at a time when replies to the Questionnaire had not yet been received from the Governments of a number of countries, including some of considerable industrial importance, and that several of the replies that were available indicated varying degrees of hesitancy on the part of Governments to accept a general obligation to

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<sup>1</sup> INTERNATIONAL LABOUR OFFICE. *Hours of Work and Unemployment* (Report to the Preparatory Conference, January 1933), *Reduction of Hours of Work · Report of the Tripartite Preparatory Conference* (International Labour Conference, Seventeenth Session, Geneva, 1933, Report V). *Reduction of Hours of Work* (International Labour Conference, Eighteenth Session, Geneva, 1934, Report I)

Cf also *International Labour Review*, Vol XXVII, No. 3, March 1933 · "The Preparatory Conference on the Forty-Hour Week", by Fernand Maurette; Vol XXVIII, No 3, September 1933 · "The Seventeenth Session of the International Labour Conference", and Vol XXX, No 3, September 1934: "The Eighteenth Session of the International Labour Conference."



apply the reduction of hours of work over the whole field of industrial and commercial employment

The apprehensions of the Office as to the likelihood of general acceptance of its drafts at the Conference were justified by the event. After a lengthy general discussion, the Conference decided, by 71 votes to 22, to refer the Report and drafts prepared by the Office to a Committee for consideration. The Employers' delegates (with the exception of the Italian Employers' representative) declined, however, to take part in the work of this Committee. Owing to the fact that the normal distribution of voting power in the Committee was thus disturbed and that the voting strength of the Government representatives on it was not always exercised to the full, the Workers' members of the Committee were able to secure the adoption of every amendment to the texts submitted by the Office of which they approved and the rejection of every amendment of which they disapproved. The result was that while most of the provisions of these texts were accepted without change, the scope of the proposed Draft Conventions was considerably extended by the deletion or amendment of certain provisions relating to exceptions and exemptions from their application. When, therefore, the texts adopted by the Committee came up for consideration by the Conference in plenary sitting, it was impossible to secure a sufficient measure of general agreement in the Conference as to the scope of the proposed Draft Conventions, and the quorum was not obtained in the vote on the first Article of the proposed Draft Convention relating to industrial undertakings.

It was clear that further progress could not be made on the lines hitherto followed, and the Conference therefore adopted, by 75 votes to 37, a resolution which, while endorsing the principle of the reduction of hours of work and declining to abandon the attempt to give effect to the principle through some form of international regulations, provided for the possibility of a new line of approach to the solution of the problem which it had not been able to achieve at that Session. The terms of this resolution were as follows:

Whereas the reduction of hours of work, considered either as a palliative of unemployment or as a method of enabling the workers to share in the benefits of technical progress, remains one of the principal tasks of the Organisation,

Whereas the Conference, by its first discussion of the question last year and by embarking at its Eighteenth Session upon the

procedure for the adoption of Draft Conventions or Recommendations, has been in favour of the principle of the reform,

The Eighteenth Session of the International Labour Conference,

While recognising that at the Eighteenth Session it has not been possible to obtain the essential quorum upon the drafts under consideration,

Requests the Office to obtain further information and the Governing Body to place once more the question of the reduction of hours of work upon the Agenda of the next Session of the Conference, for the adoption of one or more Draft Conventions

When this Resolution of the Eighteenth Session of the Conference came before the Governing Body in September 1934, the development of the discussions on the reduction of hours of work had been as follows:

Although the representatives of the Employers (with the exception of the Italian representative) had consistently opposed the reduction of hours of work as a suitable means of reducing unemployment, the principle of the proposal had been endorsed repeatedly by substantial majorities. It had not, however, been possible to secure sufficient agreement for the application of the principle by means of general Conventions applicable respectively to industrial undertakings as a whole and to commercial and similar establishments as a whole. The possibility of a series of Conventions each applicable to a particular industry or group of industries had been envisaged in the early stages of the discussion, but progress on these lines had not continued because of the desire, in view of the steadily increasing gravity of the unemployment problem, to secure effective international action as soon and on as wide a scale as possible. With the failure of the efforts to reach sufficient agreement on general Conventions, the question again arose of giving effect to the principle through a series of special Conventions, or some similar device. Moreover, apart from the course of the discussions in the Organisation, the development of the economic situation had led to increasing stress being laid on the importance of a reduction of hours of work as a means not only of diminishing unemployment but also of enabling workers to share in the benefits of technical progress. Despite the general economic depression, technical development had proceeded at an uninterrupted and indeed, it might be said, at an accelerated pace, and there was good reason for fearing that, even if production were restored to the pre-depression level, there would still be, at any rate in certain industries, very large numbers of workers who could never be

re-employed if hours of work were maintained at their former level. There had also been important developments in two other respects. The United States of America had undertaken a reduction of hours of work over virtually the whole field of industrial and office employment and consideration had to be given both to the results of this application of the principle on a scale far exceeding any previous attempts in other countries and to the fact that the application had been effected "industry by industry", the arrangements for each industry conforming generally to a uniform standard but making special provision for special requirements. Finally, there was the important fact that two great industrial countries, the United States of America and the Union of Soviet Socialist Republics, had both become Members of the International Labour Organisation.

It was in these circumstances that the Governing Body of the International Labour Office, in September 1934, took up consideration of the Resolution adopted by the Eighteenth Session of the Conference. During the discussions of the Governing Body, the Employers' representatives (always with the exception of the Italian representative) maintained their attitude of opposition to the principle of reduction of hours of work, while the Workers' representatives still pressed to have the question placed on the Agenda of the Nineteenth Session of the Conference with a view to the adoption of a general Convention. A proposal to this effect by the Workers' group was, however, rejected by 18 votes to 10 and the Governing Body adopted, by 22 votes to 7, the following Resolution submitted by nine Government representatives

The Governing Body decides

(1) to place the reduction of hours of work on the Agenda of the Nineteenth Session of the Conference,

(2) to instruct the Office to draw up a draft for a single Convention providing for the reduction of hours of work in all classes of establishments. The Conference shall determine at that Session and at subsequent Sessions the classes of establishment to which this reduction shall apply, and the methods of application for each of them,

(3) to reserve until the next Session of the Governing Body — which will have before it reports to be prepared by the Office, including the information received in the meantime from the Governments — the final selection of the industries, establishments or categories to which it is proposed that the Nineteenth Session of the Conference should apply the reduction of hours or work

It will be noted that by the second paragraph of the resolution of the Governing Body the Office was instructed to draw up a draft for a single Convention on the reduction of hours of work. On careful examination the Office found that, for the reasons set out in the First Part of this Report, it would hardly be practicable to deal with the matter in this way, and accordingly the Office has had to submit to the Conference for consideration an alternative method of achieving the purpose which the Governing Body had in mind.

The final selection of industries to be considered by the Nineteenth Session of the Conference in accordance with the third paragraph of this resolution was made by the Governing Body at its Sixty-ninth Session in January 1935, with the result that the question appears on the Agenda in the following form:

Reduction of Hours of Work, with special reference to

- (a) Public works undertaken or subsidised by Governments
- (b) Iron and steel
- (c) Building and contracting
- (d) Glass bottle manufacture
- (e) Coal mines

The Governing Body also decided that the question should be regarded as a single item on the Agenda and not as five separate items. This followed logically upon the decision already taken, for while it had been agreed that the Conference should be called upon to consider the adoption of an international instrument laying down the principle of a general reduction of hours of work, it was recognised that there would be little value in a mere declaration of principle unaccompanied by any measures to give it practical application. It was, of course, left to the Conference itself to decide whether it would deal with the item on the Agenda by way of a single discussion or by the usual double-discussion procedure, but, having regard to the fact that the question had already been before the Conference on several occasions and that the Eighteenth Session appeared, from the terms of its Resolution, to have contemplated the adoption of one or more Draft Conventions at the next Session, the Governing Body proceeded on the assumption that the Conference might wish to reach a final decision at the Nineteenth Session in respect of at least one of the categories of employment mentioned in the item on the Agenda.

The Office has accordingly had to prepare for submission to the Conference a report on this item on the Agenda which will

enable it to proceed by way of either a single or a double discussion procedure. In accordance with the Standing Orders of the Conference, a Grey Report prepared for the first stage of the double-discussion procedure, which includes a statement of the law and practice in the various countries and a list of points as a basis for the consultation of Governments by means of a Questionnaire, has to be submitted to the Governing Body before it is despatched to Governments. In view of the special circumstances, an accelerated procedure has been adopted, but the necessity for submitting the Grey sections of the present Report to the Members of the Governing Body has inevitably delayed the publication of the Report as a whole.

Although the reduction of hours of work appears on the Agenda as a single item, it has been thought convenient to divide the Report submitted to the Conference into five separate but connected volumes, each dealing with one industry. Each volume contains, in addition to the present Introduction, three parts. Part I deals with the general principle of the reduction of hours of work and the proposals that the Office submits to the Conference for consideration in this connection, and with the reasons for which it has seemed appropriate to apply the principle in the first place to the five industries or categories of employment specified in the item on the Agenda. This matter is common to all five volumes of the Report. Part I also contains a brief examination, from the point of view of suitability for immediate consideration, of the characteristics of the particular industry or category of employment to which the volume relates. Part II of each volume provides a basis for the work of the Conference if it should decide to follow the procedure of double discussion. It gives, on the usual lines of a Grey Report, an account of existing regulations for the limitation of hours of work in the particular category of employment to which the volume relates and an examination of the problems arising in connection with international regulations, and concludes with a draft list of points on which the Office suggests that Governments might be consulted with a view to the second stage of the double-discussion procedure. Part III provides a basis for the work of the Conference if it should decide to take a final decision at its Nineteenth Session. This corresponds to the usual Blue Report and concludes with the text of a proposed Draft Convention submitted by the Office to the consideration of the Conference. Parts II and III are each more or less self-contained,

this being thought to be the more convenient arrangement even though it entails some repetition in Part III of matters already discussed in Part II. A sixth, supplementary volume gives, by way of common appendix to each of the other five volumes, a summary statement of the laws and regulations concerning hours of work in a number of countries which are of general application and not special to the particular industries dealt with in the other volumes

Geneva, *April 1935*

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The Office has accordingly prepared for the consideration of the Conference the text of a proposed Draft Convention for each of the "industries" included by the Governing Body in the item on the Agenda of the Nineteenth Session. These texts deal with the practical application of the principle and make the necessary specific provisions required to meet the circumstances of each case. The appropriate explanations of the Office's proposals and the actual texts are given in the separate volumes relating to the particular industries. For the declaration of principle, which it is suggested for the reasons set out here should be embodied in a special Resolution, the Office submits for the consideration of the Conference the following text.

#### DRAFT RESOLUTION ON THE REDUCTION OF HOURS OF WORK

Whereas unemployment has become so widespread and long-continued that there are at the present time many millions of workers throughout the world suffering hardship and privation for which they are not themselves responsible and from which they are justly entitled to be relieved,

Whereas it is desirable that workers should as far as practicable be enabled to share in the benefits of the rapid technical progress which is a characteristic of modern industry,

Whereas in pursuance of the Resolution adopted by the Eighteenth Session of the International Labour Conference it is necessary that a continuous effort should be made to reduce hours of work in all forms of employment to such extent as is possible;

The Conference therefore declares its approval of the principle of the forty-hour week as the general international standard of hours of work and as a guide for the action of the Members of the Organisation, without prejudice to further reductions of hours where circumstances permit

The Conference will proceed, at the present and subsequent Sessions, to the consideration of a series of Draft Conventions for the progressive application of this principle to the whole field of employment, having regard to the special circumstances of particular groups of establishments or classes of workers

The Conference accordingly decides to refer to a Committee for consideration the Reports prepared by the International Labour Office on the application of the reduction of hours of work to

- (a) Public works undertaken or subsidised by Governments;
- (b) Iron and steel;
- (c) Building and contracting,
- (d) Glass bottle manufacture;
- (e) Coal mines

## II. — THE ADJUSTMENT OF WAGES

There remains to be considered the question whether the Conference should take any decision in regard to the problem of wage adjustments rendered necessary by a reduction in hours of work. It is true that the wording of the item on the Agenda of the Conference makes no explicit reference to wages, but it is obvious that hours of work and wages are closely inter-related and wages have come under consideration at all stages of the discussions that have taken place concerning the reduction of hours of work. There would seem, therefore, to be no reason why the Nineteenth Session of the Conference should not make a pronouncement on the question of wages if it so desires.

The Tripartite Preparatory Conference held in January 1933 agreed by 32 votes (13 Government and 19 Workers' representatives) to 19 (3 Government and 16 Employers' representatives) that in whatever form the scheme of regulation adopted for reducing hours of work might be embodied, a Recommendation concerning the standard of living of the workers and wages should be considered. Questions regarding the maintenance of wages, salaries and the standard of living were included in the Questionnaire issued in preparation for the Eighteenth Session of the Conference and the replies showed that the opinion of Governments generally was that the question of wages and salaries, and with it the allied question of the standard of living, was of such importance that it ought to be dealt with, but that as it could not be regulated internationally by way of a Draft Convention the appropriate method of laying down at least certain general principles would be the adoption of a Recommendation. The Office accordingly submitted for the consideration of the Eighteenth Session of the Conference a draft of a Recommendation which was approved by the Committee to which it was referred, though no decision concerning it was taken by the full Conference.

In these circumstances the Office has felt itself bound to submit to the Conference a proposal which would enable it, if it so desired, to give consideration to the problem of wages, and the Office has accordingly had to examine the question of the form that its proposal should take.

It would clearly be impracticable for the Conference to adopt detailed international regulations on the subject of wages. In the first place, any international agreement as regards wages



would involve an obligation on Governments to undertake the regulation of wages. In many cases, Governments are not in a position to do this, and in most countries neither Governments, employers nor workers desire that the fixing of wages should become a Government responsibility.

Secondly, any agreement reached as to the maintenance of certain levels of wages would be exposed to two serious, if not insuperable, difficulties. At the present time international exchanges are subject to constant fluctuations, which might at any time destroy the basis on which agreement had been reached. A rise or fall in the external value of a national currency may easily produce a much greater differential for purposes of foreign competition than a rise or fall in the value of nominal wages. Moreover, any international agreement could only be of very short duration. The level of wages in each country and in each industry is determined not only by considerations of international competition but also by all the influences affecting the domestic market and the cost of living. Wage rates everywhere are therefore subject to constant readjustment. Wages cannot be stabilised indefinitely at a particular level, and if Governments were to be required, as an international obligation, to maintain some sort of equivalence with other countries, this would entail a degree of State intervention in the determination of wages that would not only give rise to very serious complications in practice but is not even generally accepted in principle.

International regulation being impracticable, the only alternative is to leave the matter to be dealt with by national action in accordance with the conditions prevailing in each country. The Conference may, however, think it proper to give some indication as to the principle upon which, and the methods by which, any adjustment of wages consequent upon the reduction of hours of work should be effected.

As regards the principle, the previous discussions on the subject have revealed a substantial measure of agreement upon the principle that the reduction of hours of work ought not to result in lowering the standard of living of the workers.

As regards the method, the most effective method would appear to be the simplest, namely, to leave the question of wage readjustments to be settled where possible by direct negotiations between the employers' and workers' organisations concerned, and to meet the case of a failure to reach agreement by enabling

either party to submit the question, if it so desires but without compulsion; to some body competent to deal with such questions

Inasmuch as the general principle of the reduction of hours of work will be dealt with, if the proposals of the Office are accepted, in a special Resolution, it would be appropriate for the question of wage adjustments to be dealt with in an accompanying resolution. The Office accordingly submits for the consideration of the Conference the following draft text:

#### DRAFT RESOLUTION ON THE ADJUSTMENT OF WAGES AND SALARIES

The Conference,

Having adopted a Resolution declaring its approval of the principle of the forty-hour week,

Considering that the application of this principle should not result in lowering the standard of living of the workers,

Invites Governments to take appropriate measures in order to ensure

- (1) that any adjustment of wages and salaries should be effected as far as possible by means of direct negotiations between the employers' and workers' organisations concerned, and
- (2) that if agreement between the parties concerned cannot be reached it should be possible for either of the parties concerned to submit the dispute to bodies competent to deal with wage questions, and further, that where no such bodies exist, they should be set up

### III. — THE CHOICE OF INDUSTRIES FOR IMMEDIATE APPLICATION OF THE REDUCTION OF HOURS OF WORK

When it was deciding the form in which the question of the reduction of hours of work should again be placed on the Agenda of the Conference, the Governing Body felt that a restatement of the principle of reduction unaccompanied by any measures to give it immediate application would not constitute a material advance, and that accordingly the Conference might wish to adopt at its Nineteenth Session international regulations to secure the application of the principle to at least one industry. The primary consideration in the choice of the industries to be specified in the item on the Agenda was therefore the likelihood of its being possible to arrive at sufficient agreement to permit of the adoption of a Draft Convention without delay. There are other criteria which might be applied for the purpose of the selection, such as the number of persons employed in the

industry, the extent of unemployment and short time, the degree to which rationalisation and mechanisation have progressed, the possibility of defining the industry with sufficient precision and stability for the purpose of international regulations, the nature and methods of organisation of work in the industry, the actual hours of work and the methods by which they are regulated. All of these are important considerations; but the dominant consideration which led the Governing Body to select these obviously very diverse industries from the much longer list of industries it had before it when making its choice was the prospect of reaching early agreement.

The iron and steel industry employs a very large volume of labour — over one and a half million persons in the five countries chiefly concerned, namely, France, Germany, Great Britain, the Union of Soviet Socialist Republics and the United States of America — and it suffers from a very high degree of unemployment. Many of the processes in the industry are, either by technical necessity or for reasons of convenience, carried on continuously, and thus afford special opportunities of creating new employment by increasing the number of shifts engaged on continuous work. Mechanisation and rationalisation have reached a very advanced stage. Taking into account both the unemployment and the technical progress in the industry, there is a strong case for giving early consideration to the question of the reduction of hours of work. Moreover, as the industry requires costly plant, it is in each country carried on in a relatively small number of undertakings, and in most countries both employers and workers are well organised, these are facts which facilitate the enforcement of regulations restricting hours of work. Such regulations exist in most countries and though they are necessarily strict and detailed, no appreciable difficulty appears to have been experienced in the application of them. Finally, the iron and steel industry has already been before the Conference, which at its Fifteenth (1931) Session adopted a resolution requesting the Governing Body to consider the possibility of undertaking, as early as possible, an investigation into the conditions of work in the industry. The Office has already collected detailed information with a view to such an investigation and therefore has already available the material required to enable it to formulate proposals for the consideration of the Conference.

“Iron and steel” is, of course, a very wide term which might cover every operation from the smelting of the ore to the manufacture of highly finished steel products. There is, however, a generally recognised distinction between iron and steel work and engineering or metal work, and, while there are no doubt border-line cases, these are not such as to give rise to serious difficulties as regards competition between producers. In order to reduce to a minimum the difficulties as to demarcation and definition, and so to facilitate the early adoption of international regulations, the Office proposes that, for the purpose of the adoption of a Draft Convention at the Nineteenth Session after a single discussion, if the Conference should decide on that procedure, consideration of the problem should be limited to the primary phases of the industry, viz the production of pig-iron, its conversion into other forms of iron or into steel, and the rolling or heavy forging of iron and steel.

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## SECOND PART

### BASIS FOR A FIRST DISCUSSION

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This part is designed to enable the Conference, if it should decide to apply the double-discussion procedure to the consideration of the reduction of hours of work in iron and steel works, to determine the points upon which Governments should be consulted with a view to the taking of a final decision at the succeeding Session of the Conference

It therefore includes a consideration of the nature and organisation of the work in the iron and steel industry, an account of existing national regulations on hours of work in the industry, and an examination of the problems arising in connection with international regulations, and concludes with a draft list of points upon which the Office suggests that Governments might be consulted.

#### I. — PRELIMINARY CONSIDERATIONS

The iron and steel industry is mainly concentrated in a very few countries, namely in France, Germany, Great Britain, the Union of Soviet Socialist Republics and the United States. These five countries in 1933 produced between them about four-fifths of the pig-iron (including ferro-alloys) and the steel (ingots and castings) of the world. The position with regard to the regulation of hours of work is, however, examined in this Report for all the countries which produce any considerable quantity of iron and steel — that is, all those States which in 1929 produced over 400,000 tons of steel ingots and castings. The countries considered are therefore the following. Australia, Austria, Belgium, Canada, Czechoslovakia, France, Germany, Great Britain, Hungary, India, Italy, Japan, Luxemburg, Poland, Spain, Sweden, the Union of Soviet Socialist Republics, and the United States of America

## NATURE AND ORGANISATION OF WORK IN THE IRON AND STEEL INDUSTRY

The following description of the nature and organisation of work in the iron and steel industry is not intended to convey a picture of the chemical and physical processes involved in the manufacture of iron and steel, nor even of the technique of production. Its purpose is to serve as an indication of the scope of the industry and as an introduction to the analysis of the regulation of hours of work in this industry.

\* \* \*

The iron and steel industry consists mainly in the manufacture of pig-iron, and the manufacture of iron and steel in a simple saleable form. This involves three main types of processes: (1) the manufacture of pig-iron through the reduction of iron ore, (2) the conversion of pig-iron into steel or iron, and (3) the rolling or heavy forging of iron and steel.

The *manufacture of pig-iron* is carried out by blast furnaces in which the iron ore is smelted by means of coke burnt under the influence of a blast of air heated to a very high temperature, pig-iron resulting from the reduction of the iron oxides of the ore partly by means of the carbon monoxide produced by the combustion of the coke and partly by the carbon of the coke itself.

Apart from the blast furnace proper, important ancillary plant is required. The coke is sometimes produced in the same establishment, its production yielding gas used for heating and generating power as well as a number of chemical products resulting from the distillation of coal. A large plant is required to heat the blast blown into the furnace. The gases given off by the blast furnace are themselves used to generate power for other branches of the establishment, this involving the use of extensive plant to remove the dust particles from them. There are also large storage bins for coke, iron ore and flux, and the apparatus required for handling these materials.

The blast furnace yields pig-iron of various qualities which may either be run into ladles whilst still in a molten state with a view to being immediately converted to steel in the same establishment, or may be run into moulds prepared in the pig beds. These pigs may also be converted in the same establish-

ment, or they may be sold to another establishment for conversion or for foundry purposes. It is, however, usual to find steel-melting plants in the same establishment as the blast furnace. Slag is also produced in the blast furnace, and must be run off, being either wasted or sold as a by-product.

The main work consists in charging the furnace with ore, coke and flux and in tapping the furnace. There is also much incidental work in the handling of the materials. Considerable developments have taken place in recent years in the replacement of manual labour by mechanical appliances. Certain parts of the work such as the tapping of the furnace call for a high degree of experience and skill on the part of the worker. In addition, there are of course the workers attached to the coke ovens (if any), the power plant and the blast generating plant.

Blast furnaces are usually operated continuously, as any stoppage of the operations was until recently considered practically impossible without very serious loss.

The *conversion of pig-iron into steel or iron* is the second typical process of the industry. It consists essentially in remelting the pig-iron in such a manner as to reduce its carbon content. At the same time a part of certain impurities usually found therein (silicon, phosphorus) are removed and, if necessary, other substances (manganese, nickel, chromium, etc.) are added so as to give the metal the qualities required of it.

This process is carried out in a number of ways. The pig-iron may be placed in a large container or Bessemer converter, through which hot air is blown at high pressure, thus causing the oxidation of the impurities contained in the pig-iron. A variant of this process, the Thomas process, involves the use of a special lining to the converter and requires a longer blowing. It is suitable for pig-iron of high phosphorus content. The operation, in the case of most steels, only takes about twelve to fifteen minutes per charge, which may be of about twenty-five to thirty tons. A larger quantity of steel is, however, made in open-hearth furnaces, in particular Siemens-Martin furnaces, in which the operation takes much longer (six to ten hours according to the product), but which enables numerous varieties of steel of special quality to be turned out. In these furnaces the charge usually consists not only of pig-iron, but also of selected scrap-iron, with the addition of various other substances. Electro-metallurgical methods are also used in the manufacture of steel, the smelting being done in electric



crucibles A relatively small quantity of steel is also produced by melting the pig-iron and other ingredients in small crucibles or "pots", this being in particular the case for tool steel of high quality

Iron is produced nowadays only in very small quantities; the usual method, which applies also to certain qualities of steel, is to stir or "puddle" pig-iron in a liquid state in a puddling furnace, thereafter forging it

The steel furnaces and converters yield steel in the form of large ingots or moulds, ready to be rolled These are usually kept hot, pending passage to the blooming mill, in "soaking pits" The qualities of steel produced are numerous, varying from steel which is almost pure iron to alloys containing not more than 50 per cent of iron

The work in connection with steel converters or furnaces consists mainly in charging the converter or furnace with the requisite materials, ensuring that the smelting is proceeding satisfactorily (a matter calling for considerable skill), emptying the molten metal into ingot moulds, and conveying the ingots to the blooming mill or to the soaking pit The ancillary work consists mainly in supplying the blast of air, and the recuperation and control of the gases used for heating purposes There are also a number of workers who are engaged whilst the plant is not operating on the relining of furnaces and on current repairs Work in connection with conversion of pig-iron into iron or steel is also carried out under difficult conditions, the worker being frequently exposed to considerable heat

The work in connection with Bessemer converters or steel furnaces need not be carried out continuously over the week-end It is in all countries continuous during the week, but different countries, and even different establishments in the same country, vary in their practice as regards the week-end stoppage The main advantage of continuous operation is of course economy in heating, and continuous operation is in some countries resorted to whenever the demand for steel increases It is also necessary for an open-hearth furnace to start smelting several hours, usually eight hours, before the rolling mills start work, with the result that, in certain countries, melters come on duty on the Sunday afternoon in order that the mill may start work at night In the case of crucible steel melting, work may be carried out by day shifts only There is an economic advantage in having a long working day, in order to economise heat

The *rolling and heavy forging of iron and steel* involve essentially a series of mechanical operations which, though they also change the quality of the metal, are mainly intended to give it the shapes required for its ultimate use. The steel ingot has in most cases to be given a more suitable shape in the blooming mill, where it is passed several times between heavy rollers, the product being in most cases a bloom, or, after further rolling, a billet. These products may be delivered as they are to establishments making certain special forgings or shapes, but they are, as a rule, too unwieldy for ordinary purposes. The greater part of the blooms or billets must therefore be passed through the rolling mills, from which they will be turned out in a number of special shapes required by the trade, such as long rods, bars, plates, rails, various structural shapes (angle-bars, T-rails, I-rails, etc.), sheet bars, skelp, strip or wire rods. In some countries different establishments specialise in the production of one or other of these shapes, this being in particular the case for sheet-bars, which are destined, after further rolling, to become tin plate, galvanised iron plate, uncoated sheet, etc.; skelp, which, by a process of drawing and welding is turned into pipe, strip, which is destined for hoops and bars; and wire rods, which are drawn into wire. In addition, plates or other shapes may be pressed to form wheels or specially-shaped slabs, or may be used for making axles or springs, or otherwise transformed by forging or pressing.

All these processes which follow the first rolling may be carried out either in the same establishment as the rolling or in separate establishments. Thus, for instance, re-rolling mills, bar drawing works, tube welding works, drop forges and hammer works may be separate establishments or they may be merely departments of a single iron and steel works.

The work in rolling mills consists very largely in the supervision of the machinery. This is the case for practically all blooming mills and many finishing mills — the metal passes through a continuous series of machines and is mechanically handled. The rolling of small sections however still involves a good deal of manipulation of the metal by hand. Drawing works are highly mechanised and the work is largely a matter of minding and feeding machines.

A great deal of labour is involved in incidental handling of the material produced, such as straightening, stacking, preparing for transport, etc., operations which are frequently very much

less machine-aided than the actual production. Work ancillary to rolling, drawing, etc., includes the turning or grooving of the rolls and the running of the power plant which drives the machinery and of the reheating furnaces

The work in connection with rolling and heavy forging is not necessarily continuous, and would appear to be very rarely so in practice. The usual arrangement is continuous work during the week with an interruption over the week-end, though heavy forging in particular may well be carried out by day shifts only. The advantage of the continuous operation of rolling mills lies in the fact that the pig-iron production, which is continuous, the smelting of steel and the rolling can be more easily co-ordinated

In addition, reference must be made to the considerable number of other workers who are not directly employed on or in connection with the ordinary work of the blast furnaces, steel furnaces or converters, or rolling and heavy forging works and their ancillary plant. These men are largely unskilled workers employed in the general handling of the materials, loading and unloading, etc. There are also workers engaged in maintenance work, which is usually done outside the normal period of operation of the establishment and involves a certain amount of work on Sundays and legal public holidays. All these workers usually work in single shifts during the day-time, but occasionally in two shifts.

## II. — NATIONAL REGULATION OF HOURS OF WORK

### 1. Form of the Regulations

In most countries hours of work in the iron and steel industry are regulated by the legislation applicable to all industrial undertakings. A summary of this general legislation is given in a separate volume of this Report. Apart from references to the iron and steel industry that are to be found in the schedules of operations which may be carried on without interruption, only one general law on hours of work, that of Spain, contains clauses concerning the iron and steel industry in particular. In addition, general legislation is applied or supplemented by special Decrees in France and in Germany.

Besides legislation, hours of work are also regulated by instruments having the force of law in Australia (New South Wales), where awards of the Court of Industrial Arbitration or

of conciliation committees have been issued, and in the United States, where a code of fair competition is applicable to the industry. In addition to such regulations, collective agreements exist in a number of countries. In this chapter reference is made to information derived from collective agreements in force in Czechoslovakia, Great Britain, Italy, Poland and Sweden

It must be borne in mind in reading this section that the general legislation on hours of work, which in most cases runs on the lines of an 8-hour day and a 48-hour week, with a 56-hour week for continuous work, has not been reproduced, as it is summarised in a separate volume. Further, legislative measures have been examined only as regards the employment of adult males, and, since the proportion of women and children employed in this industry is extremely small, no account has been taken of the legislation existing in many countries governing the work of women and children

The following statement gives an indication of the regulations governing hours of work in the iron and steel industry in each of the countries which have been taken into consideration for the purpose of this Report and for which information is available

### Australia

The iron and steel works are mainly to be found in New South Wales, and hours of work in this industry are regulated by awards of the Court of Industrial Arbitration and Conciliation Committees applicable to iron and steel makers in the State <sup>1</sup> and to the separate awards of conciliation commissioners applicable to the employees of Australian Iron and Steel, Limited, at Lithgow <sup>2</sup> and at Port Kembla <sup>3</sup>, and to employees of the steel works of the Broken Hill Proprietary Company, Limited <sup>4</sup>

### Austria

The general legislation on hours of work is applicable to the iron and steel industry

### Belgium

The general legislation on hours of work is applicable to the iron and steel industry.

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<sup>1</sup> *New South Wales Industrial Gazette*, Vol XV, p 140, Vol XX, p 1144, Vol XXII, p 1121

<sup>2</sup> *Ibid*, Vol. XXXV, p 94, Vol XXXIX, p 325

<sup>3</sup> *Ibid*, Vol XLIII, p 892, Vol XLVI, p 134

<sup>4</sup> *Ibid*, Vol XXVIII, p 1054

## Czechoslovakia

The general legislation on hours of work applies to persons employed in the iron and steel industry. There is also a general collective agreement, concluded on 1 June 1928 between the Association of Employers of the Iron and Metal Industries and the International Metal-Workers' Union in Komotau and the Czechoslovak Metal-Workers' Union in Prague<sup>1</sup>. The conditions of employment of workers employed in State iron and steel works are determined by an agreement of 22 August 1933<sup>2</sup>.

## France

Hours of work are regulated by a Decree dated 9 August 1920<sup>3</sup> issuing public administrative regulations under the Act of 23 April 1919 respecting the 8-hour day. For the categories of workers engaged on continuous processes whose weekly hours of work may be extended up to 56 hours a week on the average, the Decree of 9 August 1920 refers to a Decree of 31 August 1910<sup>4</sup>. Amending Decrees of importance are dated 2 April 1926 (revising the original Decree on a number of points)<sup>5</sup>, 24 May 1930 (applying the provisions of the Decree to the departments of the Upper Rhine, the Lower Rhine and Moselle)<sup>6</sup>, 23 April 1933 (extending the scope of the original Decree)<sup>7</sup>, and 14 May 1934<sup>8</sup> and 29 October 1934<sup>9</sup> (dealing with the abolition of overtime).

## Germany

The general legislation on hours of work is applicable to persons employed in the iron and steel industry. In addition, the power to restrict the extension of working hours beyond 8 hours a day in respect of dangerous or unhealthy trades<sup>10</sup> has been exercised in the case of

<sup>1</sup> *Rahmenvertrag für die Metallindustrie* von 1. Juni 1928

<sup>2</sup> Kolektivní smlouva z 22. srpna 1933 (Statní báňské a hutnické závody).

<sup>3</sup> Decree issuing public administrative regulations under the Act of 23 April 1919 respecting the 8-hour day in the metal-working and metallurgical trades, dated 9 August 1920. *Legislative Series*, 1920, Fr. 17.

<sup>4</sup> Decree determining relaxations of the general regulations for the weekly rest as regards special workers employed in works where continuous furnaces are used, dated 31 August 1910. *Bulletin of the International Labour Office*, Basle, Vol. VI, p. 166, reproduced in the report of the International Labour Office on *The Regulation of Hours of Work in European Industry*, 1928, p. 105.

<sup>5</sup> Decree to amend the Decree of 9 August 1920 issuing public administrative regulations under the 8-Hour Day Act of 23 April 1919 for the metallurgical and metal-working trades, dated 2 April 1926. *Legislative Series*, 1926, Fr. 20.

<sup>6</sup> *Journal Officiel*, 1930, No. 132.

<sup>7</sup> *Legislative Series*, 1933, Fr. 1.

<sup>8</sup> *Journal Officiel*, 16 May 1934.

<sup>9</sup> *Journal Officiel*, 31 October 1934.

<sup>10</sup> Order concerning hours of work, dated 21 December 1923 (*Legislative Series*, 1923, Ger. 7) the relevant clause of which was reproduced in the later texts of the Hours of Work Orders dated 14 April 1927 (*Legislative Series*, 1927, Ger. 2) and 26 July 1934.

certain operations in the manufacture of iron and steel by means of Orders of 20 January 1925<sup>1</sup> and of 16 July 1927<sup>2</sup>

### Great Britain

Hours of work of adult males in the iron and steel industry are for the most part regulated by collective agreement or are dependent upon custom. In the case of blast furnacemen, there are a number of district agreements regulating conditions of employment made between representatives of district employers' associations or groups of firms and the representatives of the blast furnacemen<sup>3</sup>. The regulation of hours of work generally follows the lines of the Cleveland and Durham "Regulations for working under three shifts per 24 hours", dated 4 February 1898<sup>4</sup>. The hours of work of steel melters and millmen are mainly regulated by the so-called "Newcastle" Agreement<sup>5</sup> of 19 February 1919 as modified by three agreements which came into force on 2 February 1930<sup>6</sup>. The hours provisions of these agreements also apply to puddlers in the Midlands. The hours of work of crucible steel melters in the Sheffield district are regulated by an agreement of 28 July 1921<sup>7</sup> and those of puddlers and millmen in the West of Scotland by an arbitration award dated 19 March 1929<sup>8</sup>. Bricklayers employed in the iron and steel industry are in several districts covered by an agreement of 18 June 1923 as modified on 10 March 1933<sup>9</sup>.

### India

The general legislation on hours of work in British India is applicable to the iron and steel industry. Nearly all the iron and steel is produced in British India.

### Italy

The general legislation applies to workers in the iron and steel industry. Its provisions were completed by the national collective agreement for the metal-working, metallurgical and allied industries of 15 February 1928<sup>10</sup>. Since then, the inter-confederal agreement for the re-absorption of the unemployed into industry of 11 October 1934<sup>11</sup> has established the principle of the 40-hour week, and the measures for its introduction in the metal-working, metallurgical and allied industries are contained in the collective agreement of 23 November 1934<sup>12</sup>.

<sup>1</sup> Order respecting hours of work in coke works and blast furnaces, dated 20 January 1925. *Legislative Series*, 1925, Ger 1.

<sup>2</sup> Order respecting hours of work in steel works, rolling mills and other establishments in the iron and steel industry, dated 16 July 1927. *Legislative Series*, 1927, Ger 9.

<sup>3</sup> UNITED KINGDOM, MINISTRY OF LABOUR. *Collective Agreements between Employers and Work People*, Vol I, p 124.

<sup>4</sup> *Ibid*, p 131.

<sup>5</sup> *Ibid*, p 147.

<sup>6</sup> *Ibid*, pp 149-154.

<sup>7</sup> *Ibid*, pp 161 and 178.

<sup>8</sup> *Ibid*, p 164.

<sup>9</sup> *Ibid*, p 181.

<sup>10</sup> *Bollettino Ufficiale del Ministero delle Corporazioni — Supplemento per la Pubblicazione dei Contratti Collettivi di Lavoro*. Pamphlet 6, 20 February 1929, Annex No 20.

<sup>11</sup> CONFEDERAZIONE FASCISTA DEI LAVORATORI DELL' INDUSTRIA. *Il Riassorbimento della Disoccupazione in Italia*, Rome, 1935, p 15. A summary will be found in Volume VI of this Report.

<sup>12</sup> *Ibid*, p 109.

## Luxemburg

The general legislation on hours of work is applicable in the iron and steel industry

## Poland

The general legislation on hours of work is applicable to the iron and steel industry and there are few collective agreements in force for this industry. Reference has been made in this Report to a collective agreement for iron and steel works in Upper Silesia as amended by the award of a Conciliation and Arbitration Committee of 26 February and 17 March 1930<sup>1</sup>

## Spain

The general legislation on hours of work applies to the iron and steel industry. The Decree applying the 8-hour day contains special provisions referring to the metallurgical and metal-working industries<sup>2</sup>

## Sweden

The general legislation on hours of work covers the iron and steel industry, the workers in which are also provided for by a collective agreement of 2 February 1932<sup>3</sup>

## Union of Soviet Socialist Republics

The general legislation on hours of work applies to the iron and steel industry. In accordance with the Labour Code<sup>4</sup>, which provides for a reduced working day for persons employed in specially exhausting and unhealthy branches of production, the Commissariat for Labour published, on 10 November 1928, a list of such occupations, including certain workers in the iron and steel industry. This list was modified by an Order dated 25 May 1929.

## United States of America

Hours of work are regulated by a Code of Fair Competition for the iron and steel industry, approved by the President on 19 August 1933 and amended on 30 May 1934<sup>5</sup>

## 2. Definition of Hours of Work

As a general rule, the regulations special to the iron and steel industry do not specify what is meant by the term "hours

<sup>1</sup> *Dziennik Ustaw Slaskich*, 5 May 1930, No 10

<sup>2</sup> Decree to fix the maximum statutory daily hours of work at 8½ hours, dated 1 July 1931 *Legislative Series*, 1931, Sp 9

<sup>3</sup> *Överenskommelse mellan Järnbruksförbundet och Svenska Metallindustriarbetareförbundet angående Arbets- och Lönevillor för Arbetarne i Järnverkens olika avdelningar*, Stockholm, 1932

<sup>4</sup> Order of the All-Russian Central Executive Committee respecting the bringing into operation of the Labour Code of the Russian Federative Soviet Socialist Republic (1922 edition), dated 9 November 1922 *Legislative Series*, 1922, Russ 1

<sup>5</sup> NATIONAL RECOVERY ADMINISTRATION *Codes of Fair Competition*, Vol I, p 171, Vol XI, p 327

of work". The French Decree refers to "actual hours of work", and the United States Code stipulates that "the term 'hours of labor' or 'hours of work' includes only the hours of labor or hours of work in the industry, i.e. in the production or sale of any of the products of the industry"<sup>1</sup>.

Though no regulations include in the working time normal intervals for meals, the position is somewhat different in the case of shift workers for whom no long interval can be granted in the course of the shift. Provision is therefore made for breaks in such cases in *Australia* and *Great Britain*, these breaks to be included in the working time. In the Australian awards, the length of the break is usually 20 minutes, and in Great Britain the regulations applicable to blast furnacemen provide for two 15-minute breaks at specified hours.

### 3. Scope of the Regulations

The scope of the regulations requires consideration both from the point of view of the establishments which are covered and of the persons in these undertakings to which the regulations apply. In those cases where hours of work are regulated by collective agreement, however, no precise definitions are given since the agreements naturally apply to the members of the contracting employers' and workers' organisations

#### UNDERTAKINGS COVERED

In all those countries taken into consideration for the purpose of this Report and in which there is general legislation on hours of work, i.e. Austria, Czechoslovakia, France, Germany, British India, Italy, Luxemburg, Poland, Spain, Sweden, and the U S S R, all the establishments of the industry are covered. Indications on the scope of the regulations special to the industry are given below for Australia, France, Germany, Great Britain and the United States

In *Australia* (*New South Wales*) where hours are regulated by awards applying to the iron and steel workers, other awards, not considered as coming in the category of "iron and steel", apply to sheet metal workers, canister makers and wire workers.

In *France* the Decree issuing public administrative regulations, dated 9 August 1920, as subsequently amended, applies

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<sup>1</sup> For list of such products, see the Appendix, B, p. 82



to all undertakings or parts thereof in which specified industries or operations are carried on. These include both the metallurgical industry itself and the metal-working trades, but refer *inter alia* specifically to metallurgy, blast furnaces, steel works, rolling mills, electro-metallurgy, forging works, metal drawing, flangeing, stamping, drop forging, wire drawing, and the manufacture of sheet iron. The provisions of the Decree apply also to wage-earning and salaried workers employed by establishments in which the industries specified are carried on, even when their trades do not belong to those industries, if they are engaged exclusively in connection with the maintenance or working of the said establishments and annexes thereof. The provisions of the Decree also apply to the staff of central plant (power, lighting, water, gas, compressed air) attached to or connected with the establishments in which the industries specified are carried on. The scope of the Decree was extended by a Decree, issued on 23 April 1933, to metallurgical coke ovens not attached to a metal works.

In Germany, the distinction between the iron and steel industry and the processing industries was the subject of an agreement arrived at for the purpose of the interpretation of an arbitral award on 12 June 1928 between the Federation of Iron and Steel Employers of the North-Western District and the principal trade unions of the metal workers. Included in the iron and steel industry are all workers attached to blast furnaces and ancillary plant, steel furnaces, rolling mills, pressing and hammer works, drop forges, flangeing forges and similar departments, and also tube drawing rooms and turning shops in so far as they belong to an iron and steel works and work in direct connection with the rolling mill and certain auxiliary plant. Repair and construction work are only included in so far as they are mainly carried on for iron and steel works and outside activities are only incidental. The classification of departments working up material in iron and steel works producing semi-finished or finished products depends on whether in the main only the preparatory stages are carried out (iron and steel industry) or whether in the main the finished product is turned out (processing industries) :<sup>1</sup>

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<sup>1</sup> A full statement on the workers and operations included in the iron and steel industry, and on the division between that industry and the metal-working industries is given in the Appendix (pp. 83-84).

In *Great Britain*, the collective agreements apply to practically all workers in and about steel melting shops and steel rolling mills, including semi-skilled men and labourers. The 8-hour shift is general for blast furnacemen. Agreements other than those applicable to workers engaged in the manufacture of pig-iron, iron and steel apply in the case of workers engaged in the manufacture of tinplate and sheets, tubes and wire.

In the *United States*, the Code of Fair Competition is applicable to any person, firm, association or corporation operating a plant or plants in the United States for the production or sale of all or any of the iron and steel products enumerated in a schedule to the code, and the hours of work provisions apply to any employee engaged on such production or sale. These products, a full list of which is given in the Appendix (page 82), include the various forms of pig-iron; iron and steel in the form of bars, ingots, blooms, billets, rails and simple structural shapes; steel plates, standard pipes; axles and wheels, and wire and various drawn goods.

It will be seen that in all the regulations considered above the undertakings covered include those mainly engaged in the essential processes of the transformation of ore into pig-iron, the conversion of pig-iron into iron or steel, and the rolling and heavy forging of the iron or steel, though some of these undertakings may also carry out other processes.

#### PERSONS COVERED

In most cases the categories of persons whose hours of work are not regulated are dealt with in the general legislation on hours of work, and no special reference is made to persons holding particular positions in the iron and steel industry. In Belgium, however, a Royal Order of 28 February 1923<sup>1</sup>, issued under the Act of 14 June 1921 concerning the 8-hour day, specifies that "foremen refiners" in the metal industry shall be deemed to be in positions of trust and are consequently exempt.

In addition, in the *United States* the Code of Fair Competition for the iron and steel industry applicable to any employee in the industry exempts from the application of the hours provisions of the code "executives, persons employed in supervisory capacities and in technical work, and their respective staffs, and those employed in emergency work."

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<sup>1</sup> *Legislative Series*, 1923, Belg 2

#### 4. Weekly or Daily Limits to Normal Hours of Work

Reference is made in this section to the weekly or daily limit of normal hours as determined in the regulations, calculated either over one week or over several weeks. No account has been taken of the exceptions examined in subsequent sections which result in hours of work being extended beyond the normal average weekly limits fixed in the regulations

The table on page 37 gives the daily and weekly limits of hours of work which are provided for the more important categories of workers in the regulations on hours of work special to the industry.

In considering the daily and weekly limits to normal hours of work, it must be borne in mind that general legislation on hours of work is applicable to the iron and steel industry in Austria, Belgium, Czechoslovakia, British India, Italy, Luxemburg, Poland, Spain, Sweden and the U S S.R

This legislation is based on a 48-hour week and an 8-hour day in all these countries, except in *British India* where a 54-hour week and a 10-hour day apply in factories working throughout the year, and the *U.S S.R* where a 7-hour day is worked during five days out of six. For continuous processes, a 56-hour week is usually provided, except in *Czechoslovakia*, where the law provides for a 48-hour week, and in the *U.S S R*, where a 7-hour shift is worked four days out of five

In order to supplement the information given in the table, indications are given below of the limits of hours and of the arrangement of the working hours within the week.

In *France*, the Decree issuing public administrative regulations contains a special provision regarding the arrangement of hours in the case of workers who are not employed in continuous processes. It provides for either the limitation of the hours of actual work to 8 hours per working day in each week, or for the distribution of the 48 hours of actual work unequally between the working days, subject to a daily limit of 9 hours in order to admit of a Saturday afternoon rest or some other equivalent arrangement. An equivalent arrangement based on a different period, subject to a daily limitation of 10 hours, or the substitution of a half-day's rest on another week-day for the Saturday afternoon, may be authorised provisionally by way

# REGULATIONS SPECIAL TO THE IRON AND STEEL INDUSTRY

## Limits of Working Hours

Country	Form of regulation	Scope	Normal hours of work			
			Non-continuous processes		Continuous processes	
			Day (hours)	Week (hours)	Day (hours)	Week (hours)
Australia New South Wales	Award	Iron and Steel (State) Award	8 <sup>2</sup> / <sub>4</sub> or 9 h 36 m <sup>1</sup>	18	— <sup>1</sup>	— <sup>1</sup>
	"	Australian Iron and Steel Co Ltd, Port Kembla Blast furnacemen, and steel melters, etc Others	—	—	8	56
France	Decrees	Australian Iron and Steel Co Ltd, Lithgow	8 or 8 h 18 m	11	—	—
	Orders	Blast furnacemen	—	—	8	56
	Working regulations <sup>2</sup>	Steel melters	8	18	—	—
	Collective agreement	Rolling mills	7 h 20 m	11	—	—
Germany	Decrees	Others	8 or 8 h 48 m	11	—	—
	Orders	Broken Hill Proprietary Co Ltd	8 or 8 <sup>2</sup> / <sub>4</sub>	18	8	56
Great Britain <sup>3</sup>	Decrees	—	8	18	8 <sup>2</sup>	56 <sup>2</sup>
	Orders	Certain specified categories of workers on blast furnaces, steel furnaces and rolling mills	8 <sup>4</sup>	—	8 <sup>4</sup>	—
	Working regulations <sup>4</sup>	Blast furnacemen	—	—	8	56
	Collective agreement	Steel melters	8	18	—	—
	"	Millmen (Sheffield crucible steel)	11 <sup>1</sup>	—	—	—
	"	Puddlers (West of Scotland)	8	15	—	—
Italy	"	Day workers	8	15	—	—
	"	Maintenance men (building trades workers)	8	17	—	—
	Collective agreement	—	8	11	—	—
	Collective agreement	Upper Silesia	—	10	—	10
Poland	Collective agreement	Workers employed in shifts	8	48	8	56 <sup>5</sup>
	Collective agreement	Others	— <sup>5</sup>	18	—	56, 42 <sup>10</sup>
Sweden	Orders	Puddlers, refiners, and workers cleaning the gas tubes of blast furnaces	8 1/2	18	—	—
	Code of fair competition	—	6	—	—	—
Union of Soviet Socialist Republics						
United States of America			8	10	8	40

<sup>1</sup> Night work —<sup>2</sup> Furnacemen and their assistants exempt —<sup>3</sup> Categories of workers specified in text only —<sup>4</sup> Limits extensions of hours —<sup>5</sup> Limits of hours permitted beyond 8 a day (or 8 1/2 where the work has been proved to have no ill-effects) in circumstances stated in the text —<sup>6</sup> The limits for 1925 are not in all cases universally in force in Great Britain, but are representative of all the most important districts —<sup>7</sup> The regulations adopted for 1925 are those of the Durham district are generally followed elsewhere —<sup>8</sup> The limits given are followed in practice in all districts. —<sup>9</sup> On 3 days a week 20% of the day —<sup>10</sup> In open-hearth works in which continuous work is carried out by means of a fourth shift The possibility of ensuring continuous work is provided for by means of a flying shift is also provided

of exception to the above time-tables at the request of organisations of employers or workers in an industry, a district or a province, by means of a Ministerial Order issued after consultation with all the organisations concerned, and reference, where necessary, to existing agreements. Such an arrangement is not binding unless confirmed by public administrative regulations. Further, if organisations of employers or workers in any industry in any particular district or province request the establishment of a uniform system of distributing working hours for all undertakings in that industry in the district or province, public administrative regulations shall be issued to give effect to the request, after consultation of the organisations concerned, and reference, where necessary, to agreements already in existence. No regulations have been issued in the iron and steel industry in virtue of these provisions to authorise an "equivalent arrangement" or enforce a uniform arrangement of hours.

Under most regulations special to the industry, the hours of work are not the same for various branches of the industry, the main distinction being, of course, that between work in connection with continuous processes and other work. In *Italy* and in the *United States*, however, reference is made to an average 40-hour week for all employees subject to the regulations. In the *United States*, this is supplemented by a provision of the code to the effect that no employer shall cause or permit an employee to work more than 48 hours or 6 days in any one week, or more than 8 hours in any day.

Some regulations in other countries provide for different hours according to the nature of the operations, and it is consequently necessary to consider separately the different limits of hours and their distribution within the week which are applied in the main branches of the industry, i.e. to workers engaged (1) on blast furnaces and their ancillary plant, (2) on steel furnaces or converters and puddling furnaces, and (3) in rolling mills, forges, etc. In addition, a reference is made to the day workers who are not directly attached to any particular department.

*Blast furnaces* — For men working in connection with blast furnaces and certain other ancillary operations which are continuous over the week-end, an 8-hour day is the general rule. Exceptions contained in general legislation on hours of work respecting continuous processes will be found in Volume

VI of this Report, but in addition there are provisions in the regulations special to the iron and steel industry providing for a 56-hour week for workers engaged in certain operations in *Australia (New South Wales), France, Great Britain, Poland and Sweden*<sup>1</sup>.

In *Australia (New South Wales)* the normal shift of 8 hours a day including Sundays applies to blast furnacemen. In *France*, Decrees issuing public administrative regulations permit, as a permanent exception in the case of blast furnaces and the appliances connected therewith, a 56-hour week for superintendents and foremen controlling the apparatus, tippers, gangers, furnace chargers, furnace rollers, loaders of the bottom, foundrymen, cleaners, granulators, gasmen at the furnace, stokers and feeders of boilers heated by blast furnace gases, workers employed in the purification of gas; engineers for blast fans and lifts, foundrymen working eupolas for dephosphorisation and desulphurisation as well as the superintending and working staff of pig-iron mixers. In addition, the 56-hour week applies to the staff of the central plant (power, lighting, water, gas, compressed air) attached to or connected with metallurgical establishments, blast furnaces and steel works.

In *Poland*, the collective agreement for Upper Silesia provides that workers whose normal week is 56 hours may take a day off if they so desire, not deducted from the holidays legally due to them, so that in practice the actual working week may be less than 56 hours.

In *Germany*, it is only the length of the working day which is limited. A clause of the Order concerning hours of work of 21 December 1923, reproduced in the new text issued on 26 July 1934, prohibits the extension of working hours beyond the normal limits provided by the Order (8 hours) in the case of branches of industry involving particular danger to life or health or for workers who are exposed in an unusual degree to the action of heat, poisonous substances, dust and the like, unless such extension of working hours is urgently necessary in the public interest, or has been proved by many years' practice to have no ill-effects; in any event the extension may not exceed

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<sup>1</sup> The list communicated by the *Belgian* Government under Article 7 of the Hours of Work (Industry) Convention, 1919, indicates as processes which are required by reason of the nature of the process to be carried on continuously, and for which an average 56-hour week is permitted, processes necessary for the working of blast furnaces and of the apparatus fed or traversed by blast-furnace gas

half an hour This clause was applied by an Order of 20 January 1925 (1) in coke works (including coke works attached to smelting works), to workers employed in connection with the coke ovens, including the actual conveyance of the coal to the ovens and of the finished coke from the ovens, and (11) in blast furnaces to workers employed in connection with the blast furnaces, including the actual conveyance of coke, ore and flux to the furnaces, and the conveyance of the molten iron from the furnaces, and the removal of pig-iron from the casting rooms

*Steel furnaces and converters; and puddling furnaces* — For steel melters, the 8-hour shift also is usual, though there is some divergence in the weekly hours of work The regulations special to the industry show that a 56-hour week may be worked in Australia, France and Sweden by certain workers <sup>1</sup>

In *Australia (New South Wales)*, this applies to the workers on steel furnaces in the Iron and Steel Company at Port Kembla

In *France*, a 56-hour week is permitted for the following workers attached to continuous open-hearth steel furnaces superintendents and foremen in charge of the working of the appliances, chargers, foundrymen, gasmen, tapmen and cleaners, men from the melting plant handling ingot-moulds in the soaking pits, ingot strippers, as well as superintendents in charge of the working of the appliances, and stokers in shafts and furnaces for reheating steel ingots, and in sundry cement steel furnaces and continuous furnaces for the manufacture of crucible steel The same provisions apply to the superintendents and foremen in charge of the working of the appliances in electro-metallurgical factories Otherwise, the 48-hour week applies

In *Sweden*, a 56-hour week is worked in Bessemer works and dolomite cupola furnaces

On the other hand, a 48-hour week is worked by other workers in Australia and in Great Britain and Sweden

In *Australia (New South Wales)* it is stipulated that the steel furnacemen in the Australian Iron and Steel Works at Lithgow shall work a 48-hour week, work ceasing from midnight on

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<sup>1</sup> In *Belgium*, the list of continuous processes submitted in accordance with Article 7 of the Hours of Work (Industry) Convention, 1919, includes processes necessary for the working of the refining apparatus (furnaces, converters, etc)

Saturday to midnight on Sunday, provided that second hands, gasmen and ashmen shall work on Sundays as required. At the steel works of the Broken Hill Proprietary Company, workers on the open-hearth works and the 300-ton mixers must work such part of Sunday as may be necessary to adapt the open-hearth production to the mill works. This provision implies some cessation of work on Sunday.

In *Great Britain*, collective agreements for steel melters provide for two shifts working a 48-hour week and one shift working a 17-hour week, from 2 p.m. on Sunday to 1 p.m. on Saturday, though in the Sheffield district workers in the Siemens department start at 6 p.m. on Sunday. Puddlers usually work a 48-hour week. A 15-hour week is provided for puddlers in malleable iron works in the *West of Scotland* by means of two shifts each working five spells between 6 a.m. on Monday and 6 a.m. on Saturday.

In *Sweden*, a 48-hour week is worked in open-hearth works, the collective agreement providing for a weekly rest of at least 21 hours calculated as an average over six weeks. This provision does not apply where four shifts are worked, or where an agreement is reached between the management and the workers concerned for the introduction of a flying shift.

In *Germany* and the *U.S.S.R.*, the limitation refers only to the working day.

In *Germany*, the extension of hours of work beyond the 8-hour day by more than half an hour is prohibited under the same conditions as for blast furnacemen by an Order of 16 July 1927, in Siemens-Martin, Thomas, Bessemer, electric and crucible steel works, in the case of workers employed on work at the mixers, furnaces and converters, including the conveyance of molten pig-iron to the mixers, the charging of furnaces and converters with metal, and finally, the removal of the molten or heated product, the moulds and slag, in puddling works, in the case of puddlers, furnacemen, and slingers. This restriction does not, however, apply to manual workers and labourers employed in the above cases unless they are mainly employed in work which exposes them to heat, dust or poisonous gases. A 6-hour day is provided for in the *U.S.S.R.* in the case of puddlers and refiners, whose work is considered specially exhausting and unhealthy. A provision limiting hours to 11 a day is also to be found in the collective agreement applicable to workers employed in connection with crucible steel furnaces



in the Sheffield area in *Great Britain*, but this limit may not be reached on more than three days a week.

*Rolling mills, pressing works and forges.* — In rolling mills, pressing works and forges, an 8-hour shift is usual, but the length of the working week depends upon whether or not there is a stoppage of work over the week-end

A 56-hour week is permitted by a provision of the award applicable to the steel works of the Broken Hill Proprietary Company in *Australia (New South Wales)*, in respect only of blooming mills rolling steel plates. In *Sweden* reference is made in the collective agreement to continuous operations in the plate rolling mills, and to those works which applied this system in 1922, in which cases, unless technically impossible, the hours of work, including breaks for meals, shall not exceed  $10\frac{1}{2}$  in the day. Provision is also made for working on a two-shift system in certain rolling mills and forges, and the furnaces connected with them, in which case the Sunday rest must not be less than 39 hours<sup>1</sup>.

A 48-hour week, usually worked in six shifts of 8 hours, applies in *Australia (New South Wales)* for workers in the rolling mills of the Broken Hill Proprietary Company's steel works, and in *France* and in *Sweden* in cases other than those mentioned above. This working week also prevails in forges in the greater part of *England*. In the Sheffield district, special provisions apply in rolling mills, forges and press shops, where three alternative systems of hours are prescribed in the arrangements arrived at in February 1919. viz. single shifts, double shifts and three shifts. For heavy forges and presses over 1,200 tons, it was decided that the two-shift system, with a break between the shifts, would be permissible, and for hire rolling mills and cogging and tilting hammers, a supplementary arrangement allows a 47-hour week, worked on five days and nights, to be substituted for the three-shift system.

A 45-hour week on the average is in force for millmen in *Great Britain*, the usual hours being from 10 p.m. on Sunday to 1 p.m. on Saturday. In the West of Scotland, the 45-hour week is worked by millmen in malleable iron works by means of two

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<sup>1</sup> In *Belgium* the processes necessary for the working of the roll trains are included in the list of processes which are continuous by reason of their nature, submitted in accordance with Article 7 of the Hours of Work (Industry) Convention, 1919

shifts, each doing five spells between 6 a m on Monday and 6 a.m. on Saturday.

A 44-hour week is worked by the employees of the *Australian Iron and Steel Company, Ltd*

In *Germany*, the daily hours of work are limited in accordance with the provisions referred to above in rolling mills (except cold rolling mills) in the case of workers employed on work at reheating ovens, furnaces and sets of rolls, including the conveyance of metal to be rolled and the cutting and straightening of the rolled metal while still hot, and in forging and stamping works, in the case of workers employed on work at the furnaces, forges and stamps, including the bringing up of the iron and the removal of the hot products

*Other workers* — Workers other than those engaged directly on blast furnaces, converters or melting furnaces and rolling mills, and day workers in general, usually work according to the normal hours provided for in the general legislation on hours of work

A 48-hour week is usual and is prescribed in certain awards in *Australia (New South Wales)* and in the regulations special to the iron and steel industry in force in *Czechoslovakia, France, Poland and Sweden*

In *Australia, France and Sweden*, the arrangement of these hours is specified, but in France the provision already referred to, concerning the arrangement of the hours of work of workers engaged on non-continuous processes, applies

In *Australia (New South Wales)*,  $8\frac{3}{4}$  hours are worked on the first five days of the week and  $4\frac{1}{4}$  on Saturday, although the Iron and Steel (State) Award of New South Wales provides for five spells of 9 hours 36 minutes for night workers

In *Sweden*,  $8\frac{1}{2}$  hours are worked on the first five days of the week, and  $5\frac{1}{2}$  on Saturday

A 47-hour week is usual in *Great Britain*, worked in 8-hour spells, except for the shorter Saturday spell of 7 hours

A 44-hour week is worked in *Australia*, by the employees of the Australian Iron and Steel Company On day work, 8 hours are worked from Monday to Friday and 4 hours on Saturday, or 8 hours 48 minutes a day from Monday to Friday inclusive. Night work may be distributed over five spells of 8 hours and 48 minutes each, or over six spells of 8 hours each A 44-hour week is also provided for bricklayers and masons in melting

establishments and steel rolling mills in *England* and the West of Scotland, blast furnaces in Cleveland, West Cumberland, and Lincolnshire and wrought iron plants in the North-East district of England. Where a second or third shift is worked, the hours of work in these cases in *Great Britain* are  $37\frac{1}{2}$  a week.

A 6-hour day is provided for in the *U.S.S.R.* in the case of workers engaged in cleaning the tubes of blast furnaces, this work being considered specially exhausting and unhealthy.

It will be seen from the above analysis that a general 40-hour week has been introduced in two countries, and that in some countries a 44-hour or a 45-hour week applies to many of the workers engaged in the industry. The 48-hour week (56-hour for continuous process) is, however, the most prevalent

There would also appear to be considerable divergencies as to the hours of operation of steel furnaces and converters, the operations being suspended at week-ends in some cases, and not in others.

### 5. Averaging of Weekly Hours of Work

Most of the regulations provide for the calculation of the weekly hours of work as an average over a number of weeks

This method is usually provided for only in the case of workers engaged on continuous processes where averaging is essential to secure a rotation of shifts. Where three 8-hour shifts are worked, the usual period over which hours are averaged is three weeks.

In *Australia*, *Great Britain*, *Italy*, *Sweden* and the *United States*, the regulations special to the industry provide for the calculation of hours as an average also in the case of non-continuous processes.

In *Australia* (*New South Wales*) these provisions apply to shift workers of the Australian Iron and Steel Company at Port Kembla, who may not work more than an 88-hour fortnight without payment of overtime; in *Great Britain* this calculation is implicit in the arrangement of hours for millmen in steel rolling mills, who work in 8-hour shifts (7 hours on Saturdays) from 10 p.m. Sunday to 1 p.m. Saturday; and in *Sweden* hours for workers on open-hearth work are in certain cases calculated as an average over six weeks

In *Italy* and the *United States* the calculation of the working week as an average applies to all employees subject to the regulations. The period of calculation is four weeks in Italy or a longer period where special rotation systems render calculation over a longer period necessary. In the United States the period is six months, beginning at the date of the coming into force of the code for the workers employed at the time, and for employees taken on thereafter beginning at the date of their employment. There is in addition a stipulation, designed to ensure that the average hours of work calculated over six months shall not be exceeded by a worker who changes his employer during this period, that an employer in the industry shall not knowingly permit an employee who also shall have performed work for one or more other employers to work for him such number of hours as would result in a violation of the code had all such work been performed for him.

## 6. Making up Lost Time

Though certain general legislations allow the making up of lost time in certain cases, no provisions are to be found in the regulations special to the industry concerning the making up of lost time except in the *French Decrees*. These provide for the two following cases. First, the Departmental Inspector of Labour may, after consultation with the organisations of employers and workers concerned, authorise overtime not exceeding 40 hours a year in all to make up for time lost as a result of general stoppages of work due to the holding of local fairs or other traditional local holidays. Secondly, in the event of a general stoppage of work due to accident or *force majeure* (accidents to plant, failure of motive power, catastrophes, etc.) working hours may be extended to make up for lost time subject to the observance of the following conditions.

- (a) If the stoppage does not exceed one day, lost time must be made up within fifteen days dating from the time when work is resumed,
- (b) If the stoppage exceeds one day but does not exceed one week, lost time must be made up within thirty days dating from the time when work is resumed,
- (c) If the stoppage exceeds one week the making up of lost time may not be continued beyond the limits specified

in paragraph (b) without a written permit from the Departmental Inspector of Labour issued after consultation with the organisations of employers and workmen concerned

## 7. Exceptions

The exceptions to the normal hours of work are in most countries provided for in the general legislation on hours of work, and are consequently not considered here. Nevertheless, some of the regulations special to the iron and steel industry define the circumstances in which the normal limits of hours of work may be exceeded. In this Report, "exceptions" refer only to cases in which hours of work may exceed the normal limits of hours of work provided for in the regulations, averaged over a number of weeks. The cases provided for relate in particular to prolongations of hours allowed in order to avoid serious interference with the ordinary working of the undertaking, for instance, cases of accident, actual or threatened, urgent repairs to be done to machinery or plant, or other cases of *force majeure*; in order to ensure the succession of shifts and the replacing of missing shift workers, in cases of work exceeding a normal spell or which, for technical reasons, cannot be interrupted at will, in cases of preparatory or complementary work, in cases of intermittent work, and, finally, in cases of exceptional pressure of work.

Many of the regulations do not specify the purposes for which the limits of hours they determine may be exceeded, the possibility of overtime being only inferred from the fact that the payment of overtime rates is provided for in the regulations. It must not, therefore, be concluded from the fact that any particular country is not mentioned as providing for a prolongation of hours in the cases specified below that such overtime is not authorised for that purpose in the country in question. The only regulations which appear not to authorise any prolongations of hours beyond the normal limits set therein are the code of fair competition in the United States (except for emergency work), and the Orders already referred to in force in Germany and the U S S R applicable to limited categories of workers engaged on exhausting or unhealthy work.

*Accidents, actual or threatened, urgent repairs to be done to machinery or plant, and other cases of force majeure* — Most

general legislations provide for an exception in the case of accidents, actual or threatened, urgent repairs to be done to machinery or plant and other cases of *force majeure*. In addition provisions on this subject are to be found in the regulations special to the industry in *France, Great Britain, Sweden* and the *United States*.

In *France*, actual working hours may be temporarily extended beyond the normal limits in the case of urgent work which must be carried out immediately in order to prevent impending accidents, for salvage purposes or to repair damage to the machinery, plant or buildings of the undertaking. Unlimited extension is allowed on any one day chosen by the employer, and on subsequent days extension for not more than two hours beyond the limits fixed for the majority of the workers in the undertaking. Further, in the event of a general stoppage of work due to accident or *force majeure* (accidents to plant, failure of motive power, catastrophes, etc.) working hours may be extended within specified limits to make up for lost time<sup>1</sup>

In *Great Britain*, the collective agreement covering steel melters and millmen provides for overtime in mills where, owing to a breakdown, the material in the mill furnaces cannot be worked out by 1 p.m. on Saturday

The *Swedish* collective agreement requires overtime to be worked in the case of repairs and other jobs that cannot be postponed without inconvenience.

In the *United States*, the limitation of hours of work does not apply to "those employed in emergency work"

*Succession of shifts and replacing of missing shift workers* — As has been pointed out above, the calculation of hours of work is averaged over several weeks in the case of work carried out in successive shifts, in order to secure the customary rotation of shifts, the daily limit is, of course, exceeded on the day of the change-over of shifts, but the average weekly limit is observed

Work carried out by successive shifts may give rise to exceptions to the average limits of hours of work in certain cases

For instance, a provision in the French Decree provides for an extension not exceeding half an hour a day in the case of a

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<sup>1</sup> See p 45

foreman or specially skilled worker whose presence is indispensable for the co-ordination of the work of two shifts

Also, in order to ensure that each shift be adequately manned, it may be necessary to replace a missing shift worker by another man who has perhaps already worked the preceding shift, and has thus to work overtime. References to prolongations of hours to meet the above case are to be found in the regulations special to the industry in Australia (New South Wales), France and Great Britain

The *Australian (New South Wales)* awards sometimes provide that no man shall be liable to be called back until he shall have been off work for a period of eight hours. In *France*, the Decree provides, in the case of the work of persons engaged specially either in attending to furnaces or in connection with the transport and haulage services or in any other work, if the said work or services must be carried on continuously for more than one week, for an indefinite extension on the day on which the adjustment to facilitate the alternation of shifts takes place, provided that the said alternation does not take place at intervals of less than one week. An exception to the daily and weekly limits of hours is also allowed for the work of a foreman or a specially skilled worker whose presence is indispensable to the carrying on of operations in a workshop or to the working of a shift during the absence of a substitute. In *Great Britain*, the regulations applicable to blast furnacemen provide that "no workman shall cease work until his mate in the next shift has relieved him or until his foreman has relieved him"

*Work the duration of which exceeds the normal spell or which cannot, for technical reasons, be interrupted at will.* — Some work cannot be stopped at will and in fact normally exceeds the duration of a spell of work. Though this cause of extension of hours must exist in many cases, specific reference to it is made only in the regulations special to the industry in France, Great Britain and Spain

In *France*, the Decree provides that the hours of work may be extended by two hours a day for persons employed specially in metallurgical operations (first and second smelting, forging, rolling mills and operations connected therewith) or in other operations which for technical reasons cannot be stopped at will when they have not been completed within the normal hours on account of their nature or of exceptional circumstances. By

way of exception in the case of metallurgy, the period of two hours is extended to six hours on each day preceding the day on which work is stopped. In *Great Britain*, the agreement applicable to steel melters provides for overtime whenever for any uncontrollable circumstance a furnace does not tap until after the usual finishing time of 1 p.m. on Saturday. In *Spain*, section 19 of the Hours of Work Act provides that in forging and smelting and the repairing of machines, the joint boards may authorise overtime on the basis of a 48-hour week up to a maximum of 60 hours in the case of processes which on account of their nature cannot be interrupted before the termination thereof or until a particular stage is reached.

*Preparatory and complementary work* — Provisions allowing prolongation of hours beyond the normal limits for workers engaged on preparatory and complementary work are usual in general legislations on hours of work and are also to be found in regulations special to the iron and steel industry in *Australia*, *Czechoslovakia*, *France*, *Italy* and *Sweden*.

In *Australia* (*New South Wales*) one of the awards provides that heaters, assistant heaters, bottom makers, gasmen, and ashmen in all mills, as well as cupola and furnace chargers, furnacemen on case-hardening furnaces, and first and second helpers on open-hearth and cupola furnaces in the steel foundry, may be required to work on Sunday. The *Czechoslovak* agreement refers to overtime for preparatory and complementary work in general, with particular reference to the work of mechanics, stokers, workers engaged on tests, and on the cleaning of offices and plant. The *French* Decree provides for the extension of the working day by two hours at most in the case of foremen and charge hands engaged in the preparation for the general work of the establishment. It also provides for an extension of hours by one-and-a-half hours a day at most in the case of persons employed in connection with ovens, furnaces, stoves, drying rooms or boilers other than those used for generating power for the machinery, in the preparation of pickling liquor, heating of tubs and vats; provided that the said work is of a purely preparatory or accessory nature and does not constitute an integral part of the regular work of the establishment. In addition, hours may be extended by two hours on each day following the day on which there has been a general stoppage of work in the case of enginemen, electricians and stokers employed on



the power supply, lighting, heating and lifting apparatus The normal working day may also be exceeded by one hour in the case of persons employed in cleaning premises

The *Italian* agreement introducing the 40-hour week contains a reference to preparatory and complementary work carried on outside regular hours.

The *Swedish* collective agreement stipulates that the firing of furnaces and other preparatory work connected with the shift work in rolling mills and forges shall be completed before the normal hours begin In open-hearth works workers are bound to keep the furnaces going on ordinary holidays occurring on a week-day, as well as on the last Sunday before important repairs and on the first Sunday after the furnaces have been set going again subsequent to such repairs The furnaces must also be fired and ready before the normal hours of work begin

It will be seen that whilst in some cases the above provisions do not specify the nature of the work for which prolongations of hours are permitted, others refer to workers engaged on definite tasks such as the firing of furnaces and the preparation of machinery and cleaning

Apart from the preparatory and complementary work referred to above, there are certain tasks which can only be carried out when the plant is not running, and specific reference to such work as giving rise to overtime is found in the regulations special to the industry in Australia, Czechoslovakia, France, Italy and Sweden

In *Australia (New South Wales)*, the awards refer to the possibility of overtime or of workers being brought in on Sundays or holidays for repairs to furnaces, repairs to and renewals of the employer's plant or machinery necessary to enable work to be safely resumed on the next following day or shift, and the installation of new machinery or other plant The *Czechoslovak* agreement refers to overtime in the case of workers engaged on tests The *French* Decree permits an extension of one hour a day for persons employed either regularly or by way of exception during interruptions of production, in the upkeep and cleaning of machines, furnaces, tools and all other apparatus which cannot be stopped independently during the general working of the establishment, provided that such work cannot be performed during the ordinary working hours owing to the connection between operations The above persons may work

up to 10 hours a day, on days when work is usually stopped in the undertaking and on days preceding these. In addition, workers engaged in the maintenance of appliances and belonging to the categories of workers in whose case continuous operations are allowed<sup>1</sup> are permitted to work 56 hours a week. An extension of up to two hours a day is also allowed for the work of foremen, charge hands and workers employed specially in investigation, testing and introducing new patterns and receiving apparatus. The *Italian* collective agreement of 1928 provides that in the case of shift workers in steel works the workers in each shift must in turn carry out the work necessary to secure the proper working of the establishment. The *Swedish* collective agreement requires certain workers in open-hearth works to continue to carry out the firing required to dry furnaces after repairs, irrespective of whether the day is a Sunday or a holiday or not.

The above cases, it will be seen, refer essentially to the upkeep of furnaces and machinery and to the carrying out of tests and the installation of new machinery.

It should also be added that materials may have to be rapidly loaded or unloaded, and this may often be a cause of overtime. This case is specifically provided for in the *French* Decree, which allows an extension of two hours a day for the work of persons engaged in the loading or unloading of wagons or boats, on condition that this extension is necessary and sufficient to admit of the finishing of the said work within the required time-limits.

*Intermittent work.* — General legislation on hours of work usually provides for an exception in the case of work of an intermittent character, and the regulations special to the industry in France and Sweden provide for an extension of hours or an exemption from the scope of the regulations for such cases.

The *French* Decree permits an extension of the day by two hours at most for time-keepers and office messengers and by not more than four hours a day for the work of caretakers, watchmen, pointsmen, the staff of railways of the undertakings, motor drivers, carters, delivery-men, warehousemen, the fire brigade, weighbridge men, persons in charge of the weighing of wagons, lorries and carts. The extension is subject to the condition that it does not cause the uninterrupted rest

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<sup>1</sup> See pp. 39 and 40

period between two working days to fall below twelve hours. The *Swedish* collective agreement does not apply to gate-keepers, night watchmen, and other workers for whom, under a decision of the Labour Council, other hours of work were authorised before the agreement came into force.

*Overtime in cases of exceptional pressure of work* — The fact that overtime may be worked in cases of unusual pressure of work or for other reasons which are not specified is taken for granted in most collective agreements or awards, which simply make provision for payment at overtime rates. The question of special pay for overtime is dealt with later.

Only the *Italian* agreement introducing the 40-hour week and the *United States* code make no specific reference to overtime. In the case of Italy, the general collective agreement referred to in the separate volume on general regulations provides that overtime is deemed to be abolished. In the case of the United States, no overtime provisions are included in the code as the 40-hour week is calculated as an average over six months.

In *Australia*, *Czechoslovakia*, *Great Britain*, *Poland* and *Sweden*, the regulations special to the industry contain no absolute limit to the overtime which may be worked. The working of overtime is therefore simply subject to the conditions imposed by the general legislative provisions in force where these exist.

In *Great Britain* reference is made to week-end work in several collective agreements applicable to steel melters and millmen.

In *Poland* the collective agreement for Upper Silesia provides that if, for technical reasons connected with the working of the establishment or for reasons connected with the general welfare, overtime is inevitable it must be distributed equitably among the workers concerned. In the collective agreement applicable to the Dombrowa Basin overtime must be authorised by the factory inspector and is conditional upon the workers' consent.

In *Sweden* the collective agreement makes overtime obligatory in cases of pressure of work for workers whose work is organised in shifts. These workers may be required either to begin work at 8 p.m. on Sundays or holidays or to continue to work for a corresponding period before a Sunday or holiday. The agreement also states that overtime may not be required to such an extent that the worker is exhausted.

In *France* the number of hours' overtime is limited. The Decree of 1920 as amended in 1926 provided for an allowance of overtime for urgent work with which the undertaking has to deal (exceptional pressure of work) to the extent of 100 hours a year, subject to the condition that the daily hours of work should not in any case exceed ten hours. In view of the considerable and prolonged unemployment prevailing in certain districts, this allowance was provisionally suspended for the iron and steel industry in all districts in which the iron and steel industry is developed, by Orders of 14 May 1934. By Decrees of 29 October 1934 the suspension was prolonged until 30 June 1935. The labour inspector may, however, grant an exception to this prohibition and authorise overtime, within the above-mentioned limits, if it can be shown that the only way in which the head of the undertaking can meet an exceptional pressure of work is to have recourse to overtime and that he is unable to engage unemployed workers or employees.

#### GENERAL RESERVATIONS

In addition to the above provisions authorising prolongation of hours of work beyond the normal limits provided for in the regulations concerned, reference should be made to the fact that in *Italy* and the *United States* the regulations applying the 40-hour week make certain general reservations concerning the application of this reduction of hours, and that in *France* an extension of hours is permitted for work carried out in the interests of national safety or defence.

Reference is made *inter alia* to the *availability of suitable labour*. Both the Italian agreement and the United States code apply "so long as the labour qualified for the work shall be available", the code adding "in the respective localities where such work shall be required". The Italian agreement adds that there must be available in each establishment or department an adequate number of workers qualified for the work carried out therein. In this connection it is pointed out that account must be taken of the possible presence in the establishment of workers who possess the required qualifications but have accepted work in lower grades in order to escape unemployment.

Another reservation refers to the *availability of plant*. According to the Italian agreement, the reduction of hours

is to apply only when the increased plant and machinery is available

The *nature of the work* also involves a limiting condition in the Italian agreement, which subjects the reduction of hours to the condition that the nature of the work to be carried out shall be such as to enable an increase in hourly or daily rate of output to take place in proportion to the increase in the numbers employed. Further, the work must be such that the replacement of one worker or shift by another worker or shift will not prejudice the proper execution of the work.

Further, the *United States* code brings in *practical considerations* by stating that the limitation of hours is to apply "in so far as practicable" and *economic considerations* by stating that due regard must be had for the varying demands of the consuming and processing industries for the respective products.

In addition, in *France* the regulations refer in particular to *national safety*, and provide that actual working hours may be temporarily extended beyond the normal limits in the case of work carried out in the interests of national safety or defence or for the public service under an Order from the Government certifying the necessity for extension. The limit is to be fixed in each case by agreement between the Minister of Labour and the Department which has ordered the work.

### OVERTIME RATES

Most national regulations on hours of work provide for a higher rate of pay for part or all of the work performed beyond the normal limits of hours provided therein, or outside the usual working time. In addition, the regulations special to the industry in Australia, Czechoslovakia, France, Great Britain, Italy, Poland and Sweden contain provisions on this subject.

The table on pages 56-57 gives the overtime rates provided for in the regulations special to the industry.

It must be pointed out, however, that the regulations do not always specify the circumstances in which these overtime rates are to be paid, though there are occasional references to this subject in certain cases. The *French Decree* only requires the payment of overtime rates in cases of exceptional pressure of work and not in other cases of prolongations of hours of work beyond the normal limits laid down therein. In *Italy*, it is stipulated that preparatory and complementary work shall not

be considered as overtime. In other regulations, on the other hand, there is no such limitation.

In *France* and in *Italy*, the regulations examined do not fix the overtime rates to be paid. In *France* the Decree provides that hours of work in cases of exceptional pressure of work shall be paid for in accordance with the custom in force in respect of overtime. In *Italy* the collective agreement for 1928 specifies that overtime rates shall vary according as to whether the overtime is worked on week-days or on Sundays, by day or by night, and that the rate must be progressively increased beyond the first two hours. The actual rates, however, are left to be determined by regional agreements.

In addition, the regulations special to the industry occasionally provide for a higher rate of wages to be paid on Sundays and legal public holidays, and sometimes also on Saturday afternoons. Whenever such rates are provided in cases in which the normal schedule of hours of work does not include week-end work, they have been assimilated to overtime rates, and are given in the table over-leaf.

### 8. Enforcement

The enforcement of regulations on hours of work is usually a matter for the national legislation and consequently collective agreements or awards do not as a rule contain provisions on this subject. The regulations special to the iron and steel industry furnish only two examples of provisions concerning their enforcement and these are to be found in the *French Decree* and in the *United States code*.

The *French Decree* provides that wage-earning and salaried employees shall not be employed in any undertaking or part thereof otherwise than as laid down in a time-table showing the arrangement of the hours of work for each day and, if necessary, for each week or for such other period as may have been authorised. This time-table must state the times at which each period of work begins and ends and before or after which no worker or employee may be employed. The total number of hours included in the periods of work may not exceed the statutory limits. Different hours of work and rest may be fixed for the classes of workers covered by the exceptions provided for in the Decree. The time-table, dated and signed by the head of the undertaking or (without prejudice to his responsibility) by the

# OVERTIME RATES

Country	Scope	Ordinary overtime rates	Week-end and holiday overtime rates
Australia : New South Wales	Iron and steel (State) award	50 per cent	Sundays and holidays 100 per cent <sup>1</sup>
	Australian Iron and Steel Company, Lithgow	50 per cent <sup>2</sup>	Sundays 100 per cent. <sup>3</sup>
	Australian Iron and Steel Company, Port Kembla	50 per cent. <sup>2</sup>	
	Blast and steel furnacemen	After 11 shifts per fortnight 25 per cent	Saturday, first two hours 50 per cent.; thereafter, 100 per cent
	Bricklayers	50 per cent	
Czechoslovakia	Broken Hill Proprietary Company	Day workers 50 per cent.	Sundays, Good Friday, Christmas Day, local Eight-hour Day 100 per cent <sup>1,3</sup>
		Shift workers all work in excess of 8 hours per day or 48 hours per week 50 per cent.	New Year's Day, Anniversary Day, Easter Monday, King's Birthday, Boxing Day and other public holidays 50 per cent
			Shift workers (other than Monday to Saturday shift workers), Sundays and recognised holidays 25 per cent
			Monday to Saturday shift workers Sundays, Good Friday, Christmas Day, local Eight-hour Day 100 per cent. <sup>1,3</sup>
			All other holidays 50 per cent
Czechoslovakia	General agreement <sup>3</sup>	Before 8 p m 25 per cent, after 8 p m 50 per cent	Sundays 50 per cent Holidays 100 per cent.
	State Iron and Steel Works	25 per cent	Sundays and holidays 50 per cent

France <sup>4</sup>	—	—	—
Great Britain	Steel melters and mill men Steel workers and Siemens Department (Sheffield district) Iron and steel workers in South Wales and Monmouthshire working on continuous shifts other than blast furnacemen Maintenance men, bricklayers and masons in various districts	— — — —	After 1 p m on Saturdays . 50 per cent 2 p m Saturday to 6 a m Monday 50 per cent 50 per cent on recognised holidays, viz. Easter Monday, Whit Monday, Whit Tuesday, August Bank Holiday Monday, Christmas Day and Boxing Day 50 per cent (week-end overtime)
Italy <sup>5</sup>	—	—	—
Poland	Upper Silesia	25 per cent	Sundays and holidays 50 per cent Easter, Whit Sunday and Christmas 100 per cent
Sweden	—	50 per cent	Sundays and holidays 75 per cent, Midsummer Day, Easter Day, Easter Monday, Whit Sunday, Whit Monday, Christmas Day, Boxing Day 150 per cent.

<sup>4</sup> Ordinary rates for workers engaged on repairs to furnaces with a minimum of 8 hours' pay to be safely resumed on the first two hours in the case of repairs to or renewals of the employers' plant or machinery necessary to enable work to be safely resumed on the next following workday or shift

The general collective agreement provides that in establishments on short time working only four days a week overtime rates are to be paid on preparatory and complementary work are paid half the above supplement  
<sup>5</sup> 50 per cent only in respect of repairs to or renewals of employers' plant or machinery necessary to enable work to be safely resumed on the next following working day  
 25 per cent for shift men working any one of the three Sunday shifts at the blast furnaces and steel furnaces

<sup>6</sup> In France, only the hours worked in excess of normal hours in cases of urgent work with which the undertaking has to deal are reckoned as overtime and paid for in accordance with the custom in force for overtime  
<sup>7</sup> In Italy, the overtime rates are fixed by regional agreements



person to whom he has delegated his powers in this respect, must be displayed in legible characters in a conspicuous position in every workplace to which it applies. Every alteration in the distribution of hours of work must, before being put into operation, be notified by an amendment to the time-table thus established. A duplicate copy of the time-table and of the amendments therein made from time to time must be forwarded in advance to the Departmental Inspector of Labour. When work is organised in shifts, the names of the workers in each shift must be shown either on a notice posted up or in a special register always kept up to date and placed at the disposal of the labour inspection staff

Further, a check on overtime is kept by requiring the head of any undertaking who desires to avail himself of the overtime allowance provided for exceptional pressure of work to forward in advance to the Departmental Inspector of Labour a declaration specifying the nature and the reason for the exemption, the number of workers (children, women and men) whose period of work is to be extended, the working hours and rest periods arranged for these workers and the time covered by the exemption reckoned in days and hours. The head of the undertaking must also keep up to date a schedule on which are recorded the dates on which the exemptions are to be made use of and the period covered by such exemptions in accordance with the notices sent to the Inspector of Labour. This schedule must be displayed in the undertaking, in the same way as the time-table

The *United States* code constitutes a valid and binding contract by and among all the members of the code, consequently any violation of any provision of the code by any member thereof constitutes a breach of the contract and, in addition to all penalties and liabilities imposed by statute, subjects the member guilty of such violation to liability for liquidated damages, the amount of which may be fixed by the Board of Directors responsible for the administration of the code. It is also provided that the Board of Directors has power to require each member of the code to furnish from time to time to the Secretary for the use of the Board of Directors such information concerning, *inter alia*, hours of work as the Board of Directors shall deem necessary or proper in order to effectuate the purpose of the code. The Board of Directors may require that any such information be furnished periodically at such times as it shall specify and may require that any such informa-

tion furnished be sworn to or otherwise authenticated. Such information shall be subject to checking for the purpose of verification by an examination of the records of the member providing the information

### III. — ACTUAL HOURS OF WORK

Some indication of the hours actually worked is given below for Austria, France, Germany, Japan, Poland, Sweden, and the United States of America. In using these figures it must be borne in mind, first, that the data reproduced below cover only a sample (of varying size) of workers, and that therefore they cannot be taken as necessarily representing the average hours per worker, or the proportion of workers working hours given, for the whole of the country, secondly, that these statistics are drawn up according to different methods so that they are not strictly comparable, and, thirdly, that the statistical returns do not always give the iron and steel industry separately, in such cases it is usually included with the metal industries. As a rule the figures are based on returns from employers, and are compiled monthly. They are given together with notes on the sources and methods of compilation in each country in the *International Labour Review* for February 1935, and in the *I L O Year-Book 1934*, Vol II.

*Austria* — In the first week of July 1933, 96.65 per cent of the workers employed in mines, blast furnaces and rolling mills worked 48 hours a week, and 3.35 per cent worked over 48 hours a week.

*France* — At the beginning of January 1935, the percentage of workers in the metallurgical industries working the weekly hours given below was as follows:

Under 32 hours	.	2 73
32 hours	.	3 33
Over 32 to under 40 hours	.	2 86
40 hours	.	14 87
Over 40 to under 48 hours	.	32 96
48 hours and more	.	43 25

*Germany* — In September 1934, according to the returns of the German Labour Front, the percentage of workers engaged in the manufacture and processing of iron and other metals working the weekly hours given below was as follows:

Under 40 hours	.	11 6
40 to under 48 hours	.	39 8
48 hours and more	.	48 6

In December 1934, according to employers' returns, the average daily hours of work of workers employed in blast furnaces and rolling mills were 7 66 a day

*Japan* — In September 1934, according to employers' returns, the average number of daily hours of work per worker per day in the metallurgical industry was 10 10.

*Poland* — In December 1934, the average weekly hours of work per worker in the metal industry was 43 4

*Sweden* — In the year 1933, the average number of hours worked per adult male worker engaged in the manufacture of iron, steel and copper was 2,173 hours, or, on the average, about 41 8 hours per week

*United States of America* — In September 1934, according to returns compiled by the Bureau of Labor Statistics, the average hours per week in the iron and steel industry (blast furnaces and steel works, rolling mills) were 24 1, and in December 1934, according to returns compiled by the National Industrial Conference Board, the average number of hours of work in the iron and steel industry was 27 5

#### IV. — REVIEW OF NATIONAL REGULATIONS AND PROBLEMS RAISED BY INTERNATIONAL REGULATION

The Conference will be called upon to decide whether a reduction of hours of work in the iron and steel industry is a matter suitable to form the subject of international regulation, and, if it should then decide not to take immediate action but to follow the usual double-discussion procedure, to settle the points upon which the Governments are to be consulted. The preceding chapter shows the subjects covered by existing national regulations, thus indicating the main problems which are likely to arise in connection with the regulation of hours in this industry. These problems are examined in the present Section with a view to determining the points on which it is suggested the opinion of Governments be sought.

##### 1. Form of the Regulations

The first question is that of deciding whether the international regulations concerning the reduction of hours of work in the iron and steel industry should take the form of a Convention or that of a Recommendation. It may be recalled that the

Eighteenth Session of the Conference requested the Governing Body of the International Labour Office to place once more the question of the reduction of hours of work upon the agenda of the Nineteenth Session of the Conference for the adoption of one or more Draft Conventions

## 2. Scope of the Regulations

### ACTIVITIES COVERED

The determination of the scope of the regulations on hours of work in the iron and steel industry is rendered particularly difficult owing to the absence of a uniform and generally accepted definition of the iron and steel industry and the absence of clear indications on this point in the regulations special to the industry. It has been seen that, apart from agreements or awards affecting only the contracting parties, only the Code of Fair Competition in the United States applies specifically to the iron and steel industry exclusively, and this code delimits the industry on the basis of its products.

In the first place it will be desirable to obtain the opinion of Governments as to the criteria which should be used for the delimitation of the scope of the regulations. There are three possible bases for delimiting the scope: (1) the *products* made by the workers whose hours are regulated, (2) the nature of the *operations* on which they are engaged, (3) the *undertakings* in which they are employed.

Delimitation by product is the method followed in the Code of Fair Competition in the United States, the hours of work provisions of which apply to employees engaged in the production or sale of any of the products enumerated in the schedule to the code. A list of these is to be found in the Appendix (page 82).

It must be borne in mind, however, that this list of products was drawn up largely with a view to the elaboration of regulations concerning conditions of sale, a purpose which is quite different from that which it is sought to achieve in the proposed international regulations. Further, an international determination of the list of products to be included would present considerable difficulty. There would probably be agreement as to the inclusion of pig-iron and of iron and steel in the form of ingots, blooms, billets, bars, rails or simple structural shapes, but divergencies would arise concerning the inclusion of sheets, tinplate, terne plate and black plate, axles, wheels, boiler tubes,

pipe and wire, all of which are included in the list contained in the United States code, but which are not considered to be products of the iron and steel industry by one or more of the British, French and German industrial classifications

Another possible method of delimitation is to make the regulations applicable to all workers engaged on certain operations such, for instance, as the operations connected with the manufacture of pig-iron in blast furnaces, the conversion of pig-iron or iron into iron or steel, and the rolling or heavy forging of iron or steel. This method is followed in a number of collective agreements which provide for different schedules of hours according to whether the worker is employed on blast furnaces or other plant operating continuously, on steel melting or on steel rolling. The object in these cases is usually, first, to differentiate between continuous operations and operations which are suspended over the week-end, and, secondly, to ensure a co-ordination of the different departments in the same establishment, e.g. to ensure that where steel melting is stopped over the week-end, the furnaces start melting some hours before the mills start rolling. In Germany also the orders limiting prolongations of hours beyond eight a day refer specifically to workers engaged on certain operations, but it should be borne in mind that the express purpose of these regulations is to prevent an unduly long working day in the case of workers exposed to heat, dust or poisonous gases.

The method of delimiting the scope by operations would, like delimitation by products, lead to different workers in the same undertaking being subject to different regulations concerning hours. It is true that the Sheet-Glass Works Convention, 1934, applies to persons who work in successive shifts in necessarily continuous operations in certain sheet-glass works. In that case, however, the Conference was dealing with a single clearly defined class of establishments and the application of a similar restriction in the iron and steel industry would entail the exclusion of a very large number of workers engaged in the industry, since workers in the same undertaking working in ancillary services not specifically mentioned would be excluded, as well as a large number of general labourers. This method would also lead to anomalies; for instance, workers engaged on rolling operations in an iron and steel works might be covered by the regulations, and other workers engaged in the same undertaking on further processing would not be covered. In

particular, if national industrial classifications be taken as a guide, divergencies would be likely to arise in connection with the second rolling, cold rolling, tin plate rolling, stamping, pressing, wire drawing, tube and pipe making, etc

The third method is to apply the regulations to all workers employed in specified undertakings. This is the basis on which the earlier Conventions on hours of work in industry and commerce were drawn up, and is also the basis of nearly all general legislation on hours of work. It has the advantage of relative simplicity in application, all the workers of a given undertaking being subject to the same regulations, even though these may permit of different schedules of hours of work being applied in different branches of the undertaking, as for instance in the case of workers engaged on continuous operations

If this method be adopted, as would seem to be desirable, there still remains the problem of defining the undertakings in which the hours of work are to be regulated. It can be assumed that the intention is to regulate hours of work in what are commonly but somewhat vaguely known as "iron and steel works", and in any international regulations it would be desirable to give greater precision to this term. There are different ways in which the essential characteristics of iron and steel works can be set out. The works may, for instance, be considered as an undertaking mainly engaged in the production of particular iron or steel products, such as pig-iron, iron or steel in the form of ingots, blooms, billets, bars, rails, or simple structural shapes, with a possible addition of certain other products such as tin plate, terne plate, tubes, axles, wheels, wire, and more complex rolled shapes. Alternatively, it may be considered as an undertaking the main plant of which is one or more of the following: blast furnace, steel furnace or converter, puddling furnace, rolling mill, with a possible addition of forging, pressing, stamping and drawing machines. Finally, it could be described as an undertaking mainly engaged in performing certain of the essential processes of iron and steel making, such as the transformation of ore into pig-iron, the conversion of pig-iron into iron or steel, the rolling of iron or steel, with a possible addition for the heavy forging.

It would be difficult to define the undertaking by means of the product it is mainly engaged in producing, owing to the great diversity of forms in which iron and steel can be turned out, and to the fact that different undertakings carry out the

processing of iron or steel to different extents. Thus, a works mainly engaged in steel melting and rolling or heavy forging of steel might not produce as its final product any of the simpler forms of iron or steel which might be enumerated in the proposed regulations, and even though a considerable part of its activity consisted of steel melting and rolling, it might deem itself to be "mainly engaged" in the production of more developed products, such as axles, wheels, tubes, wire, etc., than those which had been listed.

The definition of an undertaking by means of the main plant used by it is a simple and clearer method of delimitation in the present state of affairs in the iron and steel industry, but any international regulations intended to be valid for a certain time should allow for a change in the names and types of the appliances used, and define its scope so as to cover new methods of production should these be invented.

There is, therefore, considerable advantage in defining the undertaking by means of the process it is mainly engaged in carrying out. If this basis is adopted, there would appear to be little room for doubt as to the inclusion of persons working in undertakings mainly engaged in the manufacture of pig-iron, the conversion of pig-iron into iron or steel, and the first rolling of the iron or steel. The question arises as to what other important operations or processes should be included. The determination of the further items on this list would not affect undertakings which are mainly engaged in the operations just mentioned but incidentally take production to a further stage, but it would be important in connection with independent undertakings mainly engaged in one or other of these further processing operations such, for instance, as rolling other than first rolling, stamping, pressing, forging or drawing.

Whatever be the criterion adopted, any delimitation by undertakings should include, except in so far as provision is made to the contrary, all persons employed in the undertaking whether engaged in the plant or operations characteristic of the industry, or in the manufacture of the products of the industry or not. Thus, even if the definition only covers production up to the stage of the first rolling, workers employed in the further processing of the metal in the same undertaking would be covered. In the same way the conception of the delimitation by undertakings also leads logically to the application of the regulations on hours of work to workers employed

in auxiliary services such as the power, lighting and heating plants, blast generating plant, repair shops, building work, internal transport, and to auxiliary departments such as the gas and coke works, including the work connected with the chemical by-products of gas and coke works, slag-using works, etc. These would come under the regulations in so far as such services or plant are part of an undertaking to which the regulations apply, i.e. are included in the same physically distinct unit, but would be excluded when run in a different location as a separate unit.

On the other hand, it would not be logical to consider an undertaking to be part of the iron and steel industry only because a part of its work is concerned with the production of iron and steel; unless some indication is given that the criterion is the *principal occupation* of the undertaking, the regulations might lead to the inclusion of the whole of a motor-car factory in the iron and steel industry simply because a part of it was engaged in the manufacture of iron and steel products, or because it performed one or more of the characteristic operations of the industry. Nevertheless, the question arises whether the persons employed in the *branch* of such an undertaking that is engaged wholly or mainly in one or more of the primary processes of the manufacture of iron or steel should not be covered. Where these processes are carried on in a distinct branch of the undertaking, there would appear to be no logical reason why the workers engaged therein should not be covered.

Any delimitation of the iron and steel industry which may be incorporated in the proposed regulations is likely to leave a certain number of individual cases in which doubts might arise as to whether persons employed in particular undertakings or branches were covered by the regulations or not. This would be particularly the case in undertakings or branches for which it is difficult to state whether their main occupation is that defined by the regulations or not. It would scarcely be possible to draw a line of demarcation in such a way that there would be no case giving rise to any doubt on the subject, and it would therefore appear desirable to entrust the competent authority in each country with the fixing of the line of demarcation between undertakings or branches included in the iron and steel industry for the purpose of the regulations and other undertakings.

It is suggested, therefore, that Governments be consulted as to whether they consider that the scope of the regulations



should apply (a) to the manufacture of certain products, (b) to certain operations, or (c) to undertakings or branches thereof wholly or mainly engaged in the carrying out of certain operations. In the first two cases Governments might be asked to enumerate and define the products or operations in question. Should Governments consider that the regulations should apply to persons employed in given undertakings or branches, they might be asked to suggest a definition of these undertakings or branches, and more particularly whether they wish the regulations to be applied to persons employed.

(a) in all undertakings or branches thereof wholly or mainly engaged in the manufacture of pig-iron, the conversion of pig-iron into iron or steel, and the rolling and heavy forging of iron or steel, or

(b) in any other undertakings of the iron and steel industry.

Further, Governments might be consulted as to whether they consider that the competent authority in each country should be entrusted with the determination of the line of demarcation between undertakings or branches covered by the regulations and other undertakings or branches

### PERSONS COVERED

Regulations special to the iron and steel industry do not refer to the exclusion from their scope of any categories of persons only to be found in the iron and steel industry. In most countries the exclusion of categories of persons is governed by general legislation. Therefore the opinion of Governments might be sought on the question of which of the categories of persons generally excluded by national legislations and the other national regulations on hours of work, namely, persons holding positions of management or supervision or employed in a confidential capacity, the competent authority in each country might be authorised to exclude from the scope of the regulations

### 3. Definition of Hours of Work

The opinion of Governments might be sought on the definition of hours of work. It will be remembered that in the Hours of Work (Commerce and Offices) Convention, 1930, the Conference defined the term "hours of work" as follows. "The term

'hours of work' means time during which the persons employed are at the disposal of the employer, and does not include rest periods during which they are not at his disposal". This definition should meet with no difficulties in its applications in the iron and steel industry.

#### 4. Limits of Hours of Work

Any limit of hours of work which may be fixed by the proposed regulations should take into account the period of operation of the various appliances in the iron and steel industry in such a way as to permit normal functioning without undue hindrances. Some of these appliances, such as blast furnaces, are operated continuously without any interruption at the week-end. Others, such as steel furnaces or converters and rolling mills, usually work continuously throughout the week and may be interrupted at week-ends, while several operations, in particular, ancillary ones, may be carried out by single or double shifts.

*Weekly limit.* — The regulations special to the industry examined show that in the case of workers engaged on continuous processes the weekly hours of work vary from an average of 40 each week to an average of 56 each week, and in the case of workers engaged on other operations, apart always from exemptions granted in certain cases, hours vary from 40 to 48 a week.

Bearing in mind that the object of the proposed regulations is the reduction of hours of work, the Conference will no doubt consider that Governments should be consulted on the question of the maximum normal weekly limit to be specified in the proposed international regulations, for (a) workers engaged on continuous processes, and (b) workers engaged on other operations.

The question arises in this connection as to the processes which should be regarded as continuous. It has been pointed out in a preceding section that there are certain operations which are carried out continuously in some countries or undertakings and not in others, and that this is in particular the case for steel converters and furnaces and sometimes the case for rolling mills. Definition in the text of the proposed regulation would have the disadvantage that the processes would not be

very easy to define, that divergent views would probably be expressed as to which processes should be deemed to be continuous, and that it might in future become the practice to suspend operations now generally regarded as continuous

Another solution is to leave it to the competent authority in each country to determine the continuous processes. It is suggested, therefore, that in the case of continuous processes, Governments might be consulted as to whether the international regulations should themselves define the processes or should make provision for them without defining them, or should leave it to the competent authority in each country to determine them

*Daily limit.* — The question of the desirability of limiting not only weekly hours of work but also daily hours of work arises, and the Conference may desire to consult Governments on this point. Most regulations limit the normal duration of a spell of work to 8 hours, subject to the prolongations which may be authorised in the case of certain categories of workers, or for all workers in certain circumstances. Very few cases of normal daily hours exceeding 8 are to be found in the special regulations, and at least in one case the reference is to those undertakings in which a two-shift system is still in force.

Some exceptions to this limit, other than those resulting from a prolongation of the average weekly limit of hours of work, may have to be considered, in particular in the case of workers engaged on continuous processes, to secure the customary rotation of shifts

The Hours of Work (Industry) Convention, 1919, on which many general legislations are based, provides that where persons are employed on shifts it shall be permissible to employ them in excess of 8 hours in any one day and 48 hours in any one week if the average number of hours over a period of three weeks or less does not exceed 8 per day and 48 per week. The daily limit may also be exceeded by not more than one hour subject to specified conditions where less than 8 hours are worked on one or more days of the week

The question arises as to whether any such provision is required if hours are to be reduced to 40 in the week. On the one hand, in the case of a redistribution of hours within the week, the 40 hours may be distributed over 6,  $5\frac{1}{2}$  or 5 days without the daily limit of 8 hours being exceeded.

On the other hand, the possibility of other arrangements of hours may have to be taken into account. For example, a person may work a 5-day week consisting of 4 days of 9 hours each and 1 day of 4 hours, or he may work a 6-day week consisting of 1 day of 9 hours, 2 days of 8 hours, and 3 days of 5 hours. Governments might therefore be consulted as to the desirability of fixing a maximum daily limit.

*Calculation of the average weekly hours of work over a number of weeks.* — Certain arrangements of shifts in continuous operations require the calculation of weekly hours of work as an average over several weeks. A great diversity of shift systems may be devised, based either on the 8-hour shift or on the 6-hour shift.

One of the simplest systems is that of four 8-hour shifts succeeding each other regularly. There is a 24-hour interval between two consecutive spells of work, the workers starting each day 8 hours later than on the previous day and beginning on the fourth day at the same hour as on the first day. Each individual thus works 48 hours in one week and 40 hours in each of the three following weeks, making an average of 42 calculated over four weeks.

Another method involves four 8-hour shifts, each having the same starting time during three consecutive days. In the course of four weeks, each worker obtains four rest periods of 48 hours each, one rest of 40 hours, two of 24 hours each and fourteen of 16 hours each. A variant of this system provides three rest periods of 64 hours each, one rest period of 36 hours, and seventeen rest periods of 16 hours each. Each worker works twenty-one spells of 8 hours, i.e. 168 hours during the four-week period. The hours worked amount to 48, 40, 40, and 40 a week, thus averaging 42 hours.

Work can also be organised in four shifts of 8 hours in such a way that during a period of four weeks each shift will change its working time only three times. Each shift does seven successive spells of night work, followed by 48 hours off, during the next ten days, this shift does seven spells of day work; and finally, after a rest of 24 hours, it works a week on the evening shift, completing the period with a rest of 72 consecutive hours. In each period of four weeks, each shift has five rest periods of respectively 72, 64, 48, 40 and 24 hours. It works twenty-one spells of 8 hours, i.e. 168 hours in all, the weekly hours of

work are successively 56, 40, 40 and 32 hours, averaging 42 hours

Yet another system is that of four 6-hour shifts, each shift working 6 hours a day, the alternation being secured by one shift working two spells one day a week. In this case the hours worked are 48, 42, 42 and 36 in the course of four weeks, the average being 42

In all systems the calculation as an average over four weeks is required. It has already been pointed out that provision for such methods of calculation is made in most national regulations whether general or special to the industry. On the other hand, the great diversity of the rotation systems in use or proposed requires a very large measure of elasticity, and it would appear desirable that the international regulations should not lay down definite schedules of rotation

In the case of non-continuous processes, the question is somewhat different. Whilst some national regulations allow averaging for all workers, other regulations, on the basis of the Hours of Work (Industry) Convention, 1919, allow it only for shift workers, while others again do not include any provision on this subject at all. There is technically no necessity for a calculation over a number of weeks in the case of discontinuous operations, but it would appear that hours sometimes vary from week to week according to the shift worked. For instance, this would appear to be the case with millmen in Great Britain. Adaptation to shorter working hours could no doubt be secured with greater ease by the calculation of hours of work as on an average also in the case of workers engaged on non-continuous operations. Both the United States and the Italian systems provide for this

If hours of work are calculated as an average over a number of weeks, the question arises as to whether it is desirable, in order to prevent abuse, to fix the absolute limit of hours of work in any one week, except for such exemptions as may be mentioned in subsequent sections. In the absence of such a limit, the hours of work permitted in certain weeks might be excessive

To sum up, Governments might be consulted on the question of allowing the weekly limit of hours of work to be calculated over several weeks, and as to whether they consider that this method of calculation should be applied to all persons employed in the industry, or only to persons engaged on processes carried out by successive shifts on the seven days of the week. They

might also be asked whether they consider that the number of weeks over which the average should be calculated should be fixed in the international regulations, and, if so, what it should be or whether it should be left to the competent authority in each country to determine. They might further be asked whether the proposed regulations should include a provision for a maximum number of hours to be worked in any one week, subject to such exceptions as may be provided for.

### 5. Making up Lost Time

The regulations special to the iron and steel industry, with one exception, do not refer to the making up of lost time, and that exception only applies to the case of general stoppages of work due to breakdown of machinery or plant or other cases of *force majeure* or to the holding of local fairs or other traditional local holidays. Work in the iron and steel industry is not subject to interruptions owing to weather conditions, and the problem of making up lost time does not appear to present itself with any urgency. In view of the quite exceptional character of this provision in existing regulations, there would appear to be no need to provide for a special question to be put to Governments on this point

### 6. Exceptions

Certain exceptions to normal hours of work are provided for in the existing International Labour Conventions on hours of work, as well as in national legislations on the subject and in regulations special to the iron and steel industry. These are provided, as stated above, mainly in order to avoid serious interference with the ordinary working of the undertaking in cases of accident, actual or threatened, or urgent repairs to be done to machinery or plant and other cases of *force majeure*; in order to ensure the succession of shifts and the replacing of missing shift workers; for work the duration of which exceeds a normal spell or which, for technical reasons, cannot be interrupted at will, for preparatory or complementary work; for certain categories of persons whose work is essentially intermittent; or in order to enable undertakings to deal with cases of exceptional pressure of work.

*Prolongations in order to avoid serious interference with the ordinary working of the undertaking (accidents, etc.). — Authori-*

sation to exceed the limits of hours of work prescribed in the case of accident, actual or threatened, or in case of urgent work to be done to the machinery or plant or in other cases of *force majeure* in so far as is necessary to avoid serious interference with the ordinary working of the undertaking is provided for in most general legislations. Governments might be consulted as to whether such an authorisation should be included in the international regulations and further as to whether any limit should be set to such an extension of hours.

*Prolongations in order to ensure the succession of shifts and the replacing of missing shift workers* — Provision is made in the regulations that the daily limit of hours may be exceeded on the day of the customary rotation of shifts, and that both the daily and average weekly limits may be exceeded when necessary to permit of the replacing of a shift worker who fails to turn up at the right time by another man who has either worked on the previous shift or perhaps is a day worker who otherwise performs other work. This exception, which arises in the case of other shift workers, was also the subject of a special provision of the Sheet-Glass Works Convention, 1934, adopted by the Conference at its Eighteenth Session. Governments might be consulted as to the desirability of including an exception to the limits of hours of work prescribed to cover these cases.

*Work the duration of which exceeds the length of a normal shift, or which cannot, for technical reasons, be interrupted at will* — The analysis of the regulations special to the industry has shown that there are a number of processes the duration of which usually exceeds that of the normal shift of 8 hours and that there are also other processes the length of which cannot be determined in advance and which cannot for technical reasons be interrupted at will, such for instance as steel melting. In such cases a prolongation of hours of work is required in order to ensure the satisfactory completion of the processes.

The question arises as to whether a limit should not be set to the prolongations of hours which may be authorised for this purpose. It must be recognised, however, that it would be difficult to fix these limits in the international regulations, owing to the variety of processes used and the difficulty of fixing limits of prolongations applicable to all processes and countries. However, the competent authority in each

country might perhaps be entrusted with the fixing of these limits

Governments might therefore be consulted as to the desirability of providing for this exception, and for the fixing of a limit to it, whether in the international regulations themselves, or by the competent authority in each country.

*Persons engaged on preparatory or complementary work.* — Prolongations of hours beyond the normal limits are frequently required for preparatory and complementary work, in particular in connection with the firing of furnaces, the preparation of machinery, the repairing and upkeep of furnaces and machinery, the introduction and testing of new plant and new patterns, cleaning, and the loading and unloading of materials or goods. Most regulations, both general and special to the industry, provide for exceptions in the case of persons engaged on preparatory and complementary work.

Governments might therefore be consulted as to whether a prolongation of hours of work beyond the limits prescribed should be authorised in the case of persons engaged on preparatory and complementary work, and if so, what limit, if any, should be fixed for these prolongations, and as to whether the limit should be laid down in the international regulations or fixed by the competent authority in each country.

*Intermittent work* — The same considerations as mentioned above in connection with preparatory or complementary work apply to persons engaged on intermittent work.

In the same way Governments might be consulted as to the prolongations of hours applicable to them and on the question of setting a limit to such prolongations.

*Cases of exceptional pressure of work* — Overtime for the purpose of enabling establishments to meet exceptional pressure of work is permitted under almost all general legislations, though provisional steps have recently been taken in certain countries to reduce such overtime to a minimum.

In some branches of the iron and steel industry, the necessity for overtime for this purpose does not arise, as some of the main processes are continuous over seven days a week. On the other hand, processes which usually suspend operations at week-ends may at times operate continuously. In a number



of subsidiary occupations in which only one or two shifts are worked, overtime may be necessary for the completion of an order within a given time-limit. If, however, pressure of work is very considerable, it might be met without overtime by the working of an additional shift.

The only example of a limit to the number of hours of overtime which may be worked in a year is to be found in the French Decree, which authorised up to 100 hours a year in cases of exceptional pressure of work, but that provision has since been provisionally suspended throughout most of the industry. Nevertheless, in view of the possibility of an excessive number of hours of overtime being worked, it may be considered desirable for the international regulations to specify the maximum number of hours to be permitted under this head, as well as to fix the conditions under which such an allowance would be granted. The question arises in this connection whether it might not be desirable to divide the annual allowance of overtime into separate quotas, each quota being authorised under conditions to be specified.

Governments might therefore be consulted as to the desirability of allowing prolongations of hours of work in cases of exceptional pressure of work, and on the limits, if any, to be set to such prolongations, the division of the total allowance into separate quotas, and the circumstances under which each successive quota should be granted.

*Other reasons* — The regulations special to the iron and steel industry in certain countries, in particular in Italy and the United States, contain a number of limiting conditions relating to the availability of suitable labour and of plant, the needs of the processing and consuming industries for the products of the industry and national safety.

Governments might be given an opportunity by means of one of the questions set to indicate their desire to have included in the international regulations any exceptions other than those mentioned in the preceding sections.

*Overtime rates* — The regulations, both general and special to the iron and steel industry, in almost all cases provide for the payment of a higher rate of remuneration in the case of hours worked in excess of normal hours. This higher rate may come into force either when the length of the normal working

day is exceeded, or when the length of the normal working week is exceeded, or in both cases. In addition, most regulations provide for a higher rate in the case of overtime performed at night or on Sundays, and for a yet higher rate for overtime on certain legal public holidays. These rates are not, however, always paid for all prolongations of hours, but sometimes only in certain cases, such as in cases of exceptional pressure of work.

It would be desirable to consult Governments as to the conditions in which overtime rates should be paid and on the rates themselves, with particular reference to a higher rate for overtime performed at night, on Sundays and legal public holidays.

## **7. Measures for Enforcement and Supervision**

The Hours of Work (Industry) Convention, 1919, includes a provision requiring certain measures of enforcement, and similar provisions are to be found in most general legislations. The opinion of Governments might therefore be sought on the question of including in the proposed international regulations a provision requiring the posting of notices in the places of work concerning the system of arrangement of hours of work in force; the hours at which work begins and ends; where work is carried on by shifts, the hours at which each shift begins and ends, and, where a rotation system is applied, a description of the system; the arrangements made in cases where the average duration of the working week is calculated over a number of weeks, rest intervals not reckoned as part of the working hours, etc. Such a provision might also require the employer to keep a record of all additional hours worked, and, if necessary, of the rates of remuneration paid.

In addition, the regulations might lay down the information which should be provided by Governments in their annual reports on the working of the regulations, such, for instance, as decisions taken by the competent authority regarding the scope of the application of the regulations, extension of daily and weekly maximum limits of hours, the calculation of hours over a number of weeks, the nature and extent of exceptions, etc

# CONSULTATION OF GOVERNMENTS

*The question which might be made the subject of international regulation has been discussed above. It now remains to decide, as fully as possible, in accordance with Article 6 of the Standing Orders of the Conference, the points upon which the Governments might be consulted.*

*Taking into account the conclusions reached above and the solutions upon which, in the opinion of the Office, international agreement seems to be possible, the Office has drawn up a list of points upon which it considers that the Conference might instruct it to consult the Governments*

## 1. FORM OF THE REGULATIONS

- (a) Draft Convention, or
- (b) Recommendation.

## 2. SCOPE OF THE REGULATIONS

- (a) Regulations applicable to persons
  - (i) engaged on the production of certain products ;
  - (ii) engaged on certain operations ;
  - (iii) employed in any undertaking or branch thereof engaged wholly or mainly in carrying out certain operations.
- (b) In the case of determination of the scope by products or operations, enumeration and definition of same.
- (c) In the case of determination of the scope on the basis of undertakings or branches thereof engaged wholly or mainly in carrying out certain operations :
  - (i) regulations covering undertakings or branches thereof engaged wholly or mainly in any one or more of the following operations : conversion of ore into pig-iron, conversion of pig-iron into iron or steel, and rolling or heavy forging of iron or steel ;
  - (ii) regulations covering any other undertakings of the iron and steel industry.
- (d) Desirability of entrusting the competent authority in each country with the definition of the line which separates

the products, operations or undertakings covered by the regulations, and the products, operations or undertakings not so covered.

- (e) Desirability of authorising the competent authority in each country to exempt certain categories of persons from the scope of the regulations (e.g. persons occupying positions of management or supervision or persons employed in a confidential capacity).

### 3. DEFINITION OF HOURS OF WORK

#### 4. LIMITS OF HOURS OF WORK

- (a) Limit to the weekly normal hours of work of persons engaged :
- (i) on non-continuous processes ;
  - (ii) on processes carried out by a succession of shifts without a break at any time of the day, night or week.
- (b) Determination of the processes which are carried out by a succession of shifts without a break at any time of the day, night or week :
- (i) in the international regulations and in that case enumeration of these processes ;
  - (ii) by the competent authority in each country.
- (c) Limitation of the average weekly hours of work over a period exceeding a week :
- (i) for all persons employed ;
  - (ii) for persons engaged on operations carried out by a succession of shifts without a break at any time of the day, night or week.
- (d) Indication of the period over which the average weekly hours of work may be calculated :
- (i) in the international regulations and in that case indication of the number of weeks ;
  - (ii) by the competent authority in each country.
- (e) Limitation of the maximum hours of work in any one day : indication of this limit.
- (f) Possibility of authorising the maximum daily limit of hours to be exceeded, while respecting the average weekly limits of hours :

(i) in the case of persons engaged on processes carried out by a succession of shifts without a break at any time of the day, night or week ;

(ii) in any other cases.

Determination of the extent to which the daily limit may be exceeded.

Procedure for authorising the daily limit to be exceeded.

(g) Limitation of the maximum hours of work in any one week : indication of this limit.

(h) Possibility of authorising the maximum weekly hours of work to be exceeded, while respecting the average weekly limits of hours :

Determination of the reasons for which the maximum weekly limit may be exceeded.

Determination of the extent to which the maximum weekly limit may be exceeded.

Procedure for authorising the maximum weekly limit to be exceeded.

## 5. EXCEPTIONS

(a) Exceptions to the hours of work resulting from the provisions contemplated above

(i) in order to avoid serious interference with the ordinary working of the undertaking :

in cases of accident, actual or threatened ;

in cases of urgent work to be done to machinery or plant ;

in cases of *force majeure* ;

(ii) in order to allow the succession of shifts and the replacing of one or more missing members of a shift ;

(iii) in order to carry out processes exceeding the length of a normal shift or which it is technically impossible to interrupt ;

(iv) for preparatory and complementary work ;

(v) for certain categories of persons whose work is essentially intermittent ;

(vi) in order to enable undertakings to cope with cases of exceptional pressure of work ;

(vii) for any other reasons.

(l) Limitation of the extent to which the normal limits of hours may be exceeded in each of the above cases :

- (i) in the international regulations and in this case indication of the limits suggested ;
  - (ii) by the competent authority in each country.
- (c) In the case of normal limits of hours being exceeded owing to exceptional cases of pressure of work :
- (i) desirability of dividing the total allowance of overtime into several quotas and of providing for special conditions for the use of each of these quotas ;
  - (ii) fixing of these quotas and of the conditions to which their use should be subject.
- (d) In the case of the other reasons for the normal limits of hours being exceeded, determination of the conditions under which these exceptions may be granted.
- (e) Overtime rates for hours worked beyond the normal limits :
- (i) desirability of determining the cases in which overtime rates should be paid ;
  - (ii) determination of a uniform overtime rate ;
  - (iii) determination of different overtime rates for work carried out :
    - at night,
    - on Sundays,
    - on legal public holidays ;
  - (iv) fixing of the above overtime rate or rates.

## **6 GENERAL MEASURES FOR ENFORCEMENT AND SUPERVISION**

**Desirability of imposing certain obligations :**

- (a) **On employers :**
- posting of notices concerning : the system of arrangement of hours of work in force ; the hours at which work begins and ends ; where work is carried out by shifts, the hours at which each begins and ends ; rest intervals not reckoned as part of the working hours, etc. ;
  - keeping of records of all additional hours worked and, if necessary, the rates of remuneration paid ;
  - any other measures.
- (b) **On States :**
- information to be supplied in annual reports.
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## APPENDIX TO SECOND PART

The following texts, referred to in Sections II and IV of this part, may be of assistance to readers in considering the question of the determination of the scope of the iron and steel industry

### A

Agreement arrived at on 12 June 1928 between the Federation of Iron and Steel Employers of the North-Western District in *Germany*, and the principal trade unions of the metal workers, defining, for the purposes of the interpretation of an arbitral award of 15 December 1927, the workers or establishments belonging to the iron and steel industry and those belonging to the processing industries

#### I *Belonging to the Iron and Steel Industry*

(1) All workers attached to blast furnaces and ancillary plant, e.g. ore beds, agglomerating plant, briquetting plant

(2) All workers on the Thomas plant and the rolling mills dependent thereon, and in the attached adjustment and repair shops and dolomite plant

(3) The same workers on Siemens-Martin plant

(4) Workers on continuous welding furnaces or on other furnaces in which the material to be rolled is put in cold, as well as workers on the rolling mills, adjustment and repair shops dependent thereon

(5) The rolling-mill re-equipment crews and slagmen

(6) The power stations and blast generating plants, and rolling-mill machinery.

(7) The pressing and hammer works, drop forges, flangeing forges and similar departments

(8) The roll turning shops and the shops attached thereto, the plants which make new rolls for sale are considered part of the processing industries

(9) The tube drawing rooms, the tube turning shops, the gas-pipe turning shops and the bar drawing rooms, in so far as these departments belong to an iron and steel works and work in direct connection with the rolling-mill. Whenever these departments are independent and work up material from stock, they are deemed to belong to the processing industries

(10) The laboratories and testing shops. Establishments which are definitely research establishments are considered to belong to the processing industries

(11) Central heating plant and fuel sections

(12) Magnetic separators

(13) Electric power stations and distribution of power

(14) Engineering, electrical and railway workshops, as well as repair shops and revision shops for rolling stock and steam engines

and tool-making shops. It is in this case understood that these plants carry out repairs for the iron and steel works to which they belong, and that new parts are only made incidentally and to fill in time.

(15) Construction establishments and crews engaged on new construction work only in so far as their activity consists mainly in conditioning plant in need of repair as a result of wear. In this case also, new construction work or repair work carried out outside the establishment is allowed to a small extent only and to fill in time. Construction plant which is mainly engaged on new construction work is to be considered as processing industries.

(16) Factories making sheet metal casks and those making springs, in so far as they are part of an iron and steel works.

(17) Factories making refractory products are considered to belong to the iron and steel industry in so far as they are part of an iron and steel works.

### *II Belonging to the Metal-Processing Industries*

(1) Machine shops and similar establishments which have hitherto been considered as without question belonging to the metal-processing industries.

(2) Bridge-building

(3) Cold rolling mills

(4) Manufacture of nuts and bolts

(5) Wire-drawing mills and wire tack works

(6) Construction of rolling stock and switches

(7) Iron construction and boiler-making shops, in as far as independent establishments are concerned, and not repair shops

(8) Projectile factories

(9) Chain forging works

(10) Turning shops for mounted wheels and works attached thereto

III (1) Engineering, electrical and railway shops, including repair shops and revision shops for rolling stock and steam engines, as well as tool-making shops, are only considered to belong to the iron and steel industry when they carry out repairs for the iron and steel works to which they belong, and only make new parts to an extent which is small compared with their total output and then only incidentally and to fill in time. Whether a given piece of work is repair work is determined by the establishment giving the order.

(2) The question of whether any repair shops attached to other works belong to the iron and steel industry or to the processing industries is determined on the same basis.

(3) The question of the classification of departments working up material in iron and steel works producing semi-finished or finished products depends on whether in the main only the preparatory stages are carried out (iron and steel industry) or whether in the main the finished product is turned out (processing industries).



B

List of iron and steel products given in the *United States* code of fair competition for the iron and steel industry. The hours of work of persons engaged on the manufacture or sale of these products are regulated by the code

Axles — rolled or forged  
Bale ties — single loop.  
Bars — alloy steel, hot-rolled.  
Bars — cold-finished, carbon and alloy.  
Bars — concrete reinforcing, straight lengths.  
Bars, ingots, blooms and billets — iron  
Bars — merchant steel  
Bars — tool steel  
Ferro-manganese and spiegeleisen.  
Girder rails and splice bars therefor  
Ingots, blooms, billets and slabs — alloy  
Ingots, blooms, billets and slabs — carbon.  
Light rails — 60 lbs or less per yard — and splice bars and angle bars therefor  
Mechanical tubing  
Pig-iron — foundry, high silicon silvery, malleable, open-hearth basic, bessemer and high silicon bessemer.  
Pig-iron — low phosphorus  
Pipe — standard, line pipe and oil country tubular products  
Plates  
Posts — fence and sign.  
Railroad tie plates  
Railroad track spikes  
Rails — standard, of more than 60 lbs per yard and angle bars and rail joints therefor.  
Sheet bars  
Sheets  
Skelp  
Steel sheet piling  
Strip steel — cold-rolled  
Strip steel — hot-rolled  
Structural shapes  
Tin plate, tin mill black plate and terne plate  
Tubes — boiler  
Tube rounds  
Wheels — car, rolled steel  
Wire — drawn, except as hereinafter specified.  
Wire hoops — twisted or welded  
Wire nails and staples, twisted barbless wire, barbed wire, twisted wire fence stays and wire fencing (except chain-link fencing)  
Wire rods  
Wire — springs  
Wire — telephone

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## THIRD PART

### BASIS FOR A SINGLE AND FINAL DISCUSSION

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This part is designed to enable the Conference, if it should so desire, to take a decision at its Nineteenth Session as to the adoption of international regulations for the reduction of hours of work in iron and steel works. It therefore gives the text of a proposed Draft Convention submitted by the Office for the consideration of the Conference, together with a commentary explaining the suggested provisions Article by Article.

Before proceeding to the consideration of the proposals submitted in respect of iron and steel works, the Office feels that it may be desirable to make certain observations of a general character applicable to the proposals it submits to the Conference in respect of all the industries specially mentioned in the item on the Agenda.

In the preparation of proposals for Draft Conventions for consideration by the Conference so that it may, if it so desire, take final decisions at the Nineteenth Session, the Office has had the advantage of being able to profit to some extent by the discussions which took place prior to and during the Eighteenth Session of the Conference. On the other hand, of course, the Office has not had the benefit of the replies of Governments to detailed Questionnaires relating to the particular industries now under consideration, and has therefore not had the usual basis on which to frame its proposals. The main problems the Office has had to solve have been, first, the definition of the scope of the several Draft Conventions to be prepared and, secondly, the adaptation, with a view to meeting the special conditions and requirements of the particular industries, of the provisions contained in the existing Conventions on Hours of Work and in the draft examined, and in general approved, by the Committee of the Eighteenth Session of the Conference.

As regards the first problem, the Office has thought it expedient, in order to facilitate the early adoption of a Draft Convention concerning one or more of the five categories of

employment under consideration, to limit the scope of certain of the proposals it submits to a somewhat more restricted field than the wording of the item on the Agenda might be held to warrant. As regards the second, the Office has given as full consideration as was possible in the circumstances to the actual conditions of work in the various industries, and believes that the detailed provisions of its proposals will be found to be adapted to practical requirements. Nevertheless, the Office recognises that its proposals are inevitably more tentative in character than is usually the case.

## Commentary upon the Proposed Draft Convention for the Reduction of Hours of Work in Iron and Steel Works<sup>1</sup>

### SCOPE OF THE DRAFT CONVENTION

#### *Article 1*

1. This Convention applies to persons employed in any undertaking or branch thereof engaged wholly or mainly in any one or more of the following operations

- (a) the conversion of ore into pig-iron,
- (b) the conversion of pig-iron into iron or steel,
- (c) the rolling or heavy forging of iron or steel

2. The competent authority in each country shall define the line which separates such undertakings or branches from undertakings or branches engaged in related operations

3. The competent authority in each country may exempt from the application of this Convention.

- (a) persons occupying a position of supervision or management who do not ordinarily perform manual work,
- (b) persons employed in a confidential capacity.

#### *Undertakings Included*

"Iron and steel", even with the exclusion of the metal-working industries, covers so wide a range of products and operations that the question of the definition of the scope of a Draft Convention for the reduction of hours of work in "iron and steel" is one of some complexity. The Office is of opinion that for the purpose of framing proposals to enable the Conference to take a final decision, if it so desires, at its Nineteenth

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<sup>1</sup> The complete text of the proposed Draft Convention submitted by the Office will be found at the end of the volume

Session, it would be expedient to define the scope of the Draft Convention by reference to the primary processes of iron and steel manufacture. Accordingly, paragraph 1 of Article 1 of the draft submitted by the Office provides that the Convention shall apply in the first place to persons employed in undertakings engaged wholly or mainly in any one or more of the three primary operations of the conversion of ore into pig-iron, the conversion of pig-iron into iron or steel, and the rolling or heavy forging of iron or steel. As regards the first two of these operations there, is no room for doubt as to their primary character. The third set of operations is so described as to make it clear that only the earlier stages of the manipulation of the iron or steel are covered, "heavy" forging implying that the scope of the regulations does not extend to smithy work. Since there are, of course, many iron and steel works that do not confine themselves to these primary operations but continue to a further stage the processing of the metal, it is also provided that the Convention shall apply to the persons employed in the branches of such undertakings that are engaged in these primary operations.

The effect of defining the scope of the Draft Convention in this way would be that if a works is engaged wholly or mainly in any one or more of the primary operations, the whole of its staff — whether employed on these operations or on others — will be subject to the application of the Convention. If, however, the works as a whole are engaged mainly in operations other than the three primary operations, but include certain units that are engaged wholly or mainly in one of the primary operations, then the whole of the staff of those units will be subject to the application of the Convention. Thus, in the case of an engineering works producing its own steel, the workers employed in a branch of the works producing pig-iron, or converting it into steel, or rolling or forging the steel, would come within the scope of the Convention, while the workers engaged in the engineering operations in the other branches of the works would be outside its scope.

This extension of the scope of the Draft Convention to branches of works that are not, taken as a whole, engaged mainly in the primary operations of iron and steel production would seem to be necessary in order to secure equivalence of conditions over as wide an area as possible. It must be recognised, however, that it does not secure absolute uniformity.

Thus, comparing two works engaged in the tube trade, one of which manufactures its raw material itself, while the other buys its raw material already manufactured, the whole of the first works will be subject to the application of the Convention if it is mainly engaged in the primary operations, whereas no part of the second works will be subject to the application of the Convention at all. Disparities of this kind are an inevitable result of the application of the reduction of hours of work by stages and will, of course, disappear in the course of time as the series of Draft Conventions is extended to cover the whole field of employment. The extent of the disparities might perhaps be diminished by extending the list of operations enumerated in this paragraph, but this would no doubt raise other and perhaps more serious difficulties, since the organisation of the iron and steel industry is not uniform in all countries. On the whole, therefore, the Office has come to the conclusion that for the purpose of the first Draft Convention relating to iron and steel it should base the definition in the text it submits to the Conference for consideration upon the three primary operations enumerated in the first paragraph of Article 1.

Border-line cases may, of course, arise in which it will be necessary to determine whether or not an undertaking or branch thereof is engaged wholly or mainly in the operations enumerated in paragraph 1, and accordingly provision is made in paragraph 2 of this Article for the line of demarcation to be drawn by the competent authority in each country.

### *Persons to be Excluded*

Paragraph 3 of this Article, allowing the exemption from the application of the Convention of employees engaged in positions of supervision or management who do not ordinarily perform manual work and persons employed in a confidential capacity, follows the precedent established by the existing Conventions on hours of work.

## LIMITATION OF HOURS OF WORK

### *Article 2*

1. The hours of work of persons to whom this Convention applies shall not exceed an average of forty per week.

2. In the case of persons who work in successive shifts at processes required by reason of the nature of the process to be carried on without

a break at any time of the day, night or week, weekly hours of work may average forty-two.

3 Where hours of work are calculated as an average, the competent authority shall, after consultation with the organisations of employers and workers concerned where such exist, determine the number of weeks over which this average may be calculated

4 For the purpose of this Convention, the term "hours of work" means the time during which the persons employed are at the disposal of the employer and does not include rest periods during which they are not at his disposal.

### *The Forty or Forty-two Hour Week*

Paragraphs 1 and 2 of this Article prescribe as the maximum hours of work of the persons to whom the Convention applies an average working week of 40 hours in the case of non-continuous operations and of 42 hours in the case of continuous processes. The wording of paragraph 2 makes it clear that the longer limit of 42 hours — necessary to permit of the convenient organisation of a shift system to cover the full 168 hours of the seven-day week — applies only to operations that must, owing to their nature, be carried on without a break over a period longer than a week. Work which, while it is for technical or other reasons done by successive shifts following one another in rotation day and night, can nevertheless be interrupted at regular intervals, e.g. at the week-end, will be subject to the 40-hour limit

### *Averaging*

The limitation of hours of work prescribed in paragraphs 1 and 2 is fixed as an average. A wide variety of operations is carried on in the iron and steel works that will be subject to the Convention. Varied methods of arranging hours of work may therefore be required, so that an absolute maximum of 40 hours in any one week, while it would in many cases be the natural arrangement, might in certain cases be much too rigid to meet the requirements of practical working. Working weeks of different lengths may be necessary to allow of the rotation of shifts for workers engaged on necessarily continuous processes, and may also be required in the case of other workers. It will be remembered that the replies to the Questionnaire issued in preparation for the Eighteenth Session of the Conference showed that Governments were in general agreement as to the necessity for flexibility as regards arrangements of hours of work.

Provision has therefore been made to allow hours of work to be calculated as an average over a period where this is found necessary or desirable for practical reasons, but, in view of the diversity of conditions to be met, it does not seem possible to fix, in the international regulations themselves, a limit to the length of the period over which the average may be calculated. A maximum period of four weeks might perhaps have been laid down in the regulations, but while this would probably meet most of the cases likely to arise in practice, it might be too short in some cases and too long for others. The best course, therefore, appears to be to place the responsibility for determining the period upon the competent authority in each country. This is effected by paragraph 3 of Article 2, which also requires the competent authority to consult employers' and workers' organisations concerned before it makes any determination of a maximum period for averaging. By this means it would seem to be possible to make arrangements for averaging required by and appropriate to various kinds of work and at the same time to guard against possible abuse by a resort to averaging in cases where it is not really necessary or by the fixing of a period for averaging so long as to endanger the object of the Convention.

### *Definition of Hours of Work*

The definition of "hours of work" given in paragraph 4 of this Article, which is intended to remove a possible cause of uncertainty, is based on the definition agreed upon by the Ministers of Labour of certain countries who met in London in March 1926 to consider the interpretation of certain provisions of the Hours of Work (Industry) Convention of 1919. This definition was adopted by the Conference itself in the Hours of Work (Commerce and Offices) Convention of 1930, and the replies to the Questionnaire issued in preparation for the Eighteenth Session of the Conference showed that it met with the approval of Governments generally.

## DAILY AND WEEKLY LIMITS OF HOURS OF WORK

### *Article 3*

1 No arrangement of hours of work made under the provisions of Article 2, paragraph 1 shall allow of any person working for more than eight hours in any one day or forty-eight hours in any one week.

2 Provided that, subject to the forty-eight hour weekly limit, the daily limit may, by the sanction of the competent authority or by agreement between employers' and workers' representatives, be increased to nine hours

3 Provided also that the limits of eight and forty-eight hours may be exceeded in exceptional cases in which the competent authority, after consultation with the employers' and workers' organisations concerned where such exist, approves an arrangement of hours involving higher limits

The calculation of weekly hours of work as an average over a period of weeks gives the flexibility as regards arrangements of hours which appears to be appropriate in view of the varied requirements of the iron and steel industry. But it seems no less necessary, particularly in the case of the iron and steel industry, to fix certain limits to the extent to which the distribution of hours of work over the week or over a period of weeks may be varied. Some check is provided by the provision in Article 2 (3) requiring consultation of employers' and workers' organisations before any period for the calculation of the average is fixed, but this is not sufficient. Much of the work in the iron and steel industry is physically exhausting, and some of it is not without danger. It would therefore not be desirable to allow the working of unduly long spells, even though the weekly average would ensure some compensation. The reasons that justified the fixing of both daily and weekly limits in the Hours of Work Convention of 1919 still hold good, and a considerable majority of the replies by Governments to the Questionnaire for the previous Session of the Conference were in favour of the maintenance of these limits.

Article 3 accordingly stipulates, in paragraph 1, that however the hours of work of persons engaged on non-continuous operations and therefore subject to the 40-hour week may be arranged or averaged, the daily limit of 8 hours and the weekly limit of 48 hours may not be exceeded. The rigidity of this provision is tempered by the two succeeding paragraphs. In paragraph 2 an increase of the daily maximum to 9 hours, without alteration of the weekly limit, is permitted subject to the safeguard that the arrangement is agreed to by the representatives of employers and workers or is sanctioned by the competent authority. Still further flexibility is given by the provisions of paragraph 3, which permits of exceeding both the daily and the weekly limits. But this latitude is subject to stricter conditions, it may be availed of only in exceptional



cases and a special arrangement of hours in virtue of this provision cannot be adopted solely by agreement between employers and workers, but requires the sanction of the competent authority given after consultation with the employers' and workers' organisations

The combined effect of Articles 2 and 3 is thus to give considerable latitude in the distribution of hours of work over the days of the week, while ensuring the observance of the 40-hour weekly average over a period fixed by the competent authority and providing the safeguards against an excessively long working day or working week which are necessary even though the operation of the average would ensure that a long day or week would have to be counterbalanced by shorter days or weeks

## EXTENSION OF HOURS

### *Article 4*

1. The competent authority may by regulation provide that the limits of hours prescribed in the preceding Articles may be exceeded

- (a) in the case of persons employed on preparatory or complementary work which must necessarily be carried on outside the limits laid down for the general working of the undertaking, branch or shift,
- (b) in the case of persons employed in occupations which by their nature involve long periods of inaction during which the said persons have to display neither physical activity nor sustained attention or remain at their posts only to reply to possible calls;
- (c) in cases where the continued employment of certain persons is necessary for the completion of an operation which it is technically impossible to interrupt.

2 The regulations referred to in paragraph 1 shall determine the maximum number of hours which may be worked in virtue of this Article

Articles 2 and 3 make provision for the normal hours of work in any undertaking, but in all the existing Conventions on hours of work it has been recognised that for certain kinds of work and classes of workers it is necessary to permit rather longer hours. In accordance with this precedent, Article 4 enables the competent authority in each country to fix by regulations maximum hours of work in excess of the normal limits for persons engaged on preparatory or complementary work — for example, workers starting up steel furnaces after a cessation of work — which cannot be done during the ordinary

hours (paragraph 1 (a)), and for persons, such as caretakers, watchmen, etc., whose work is of an intermittent character (paragraph 1 (d)).

In iron and steel works it would seem necessary also to make provision for an occasional extension of hours to meet another case. Certain operations are of such a character that, once begun, they must be carried through without interruption until completed if the technical success of the operation is not to be endangered, and it is not always possible to determine in advance exactly what length of time will be required for the completion of the operation. It may happen, for example, that a furnace cannot be tipped until an hour or so after the anticipated time, or that a particular rolling operation cannot be completed by the normal time for ceasing work. Where the work can be continued by a succeeding shift of workers, of course no difficulty arises, but it may sometimes be indispensable that the work should be completed by the men by whom it was begun. This case is not covered by the provisions of Article 3, which relate to normal arrangements of hours of work, whereas the case under consideration is exceptional. The overtime required to complete the process might perhaps be reckoned as part of the overtime for which provision is made in Article 6, but it seems preferable to make a distinction between isolated cases of overtime that may occasionally be necessary for technical reasons on certain operations and the general allowance of overtime intended to meet cases of pressure of work affecting a whole undertaking or branch of an undertaking. Special provision is therefore made in paragraph 1 (c) of this Article. The fact that extension of hours in these cases will also be subject to regulations made by the competent authority will enable a strict control to be exercised over the extent to which resort is had to overtime on the ground of technical necessity.

## PROVISION FOR EMERGENCIES

### *Article 5*

The limits of hours prescribed in the preceding Articles may be exceeded, but only so far as may be necessary to avoid serious interference with the ordinary working of the undertaking,

- (a) in case of accident, actual or threatened, or in case of urgent work to be done to machinery or plant, or in case of *force majeure*, or
- (b) in order to make good the unforeseen absence of one or more members of a shift

In this Article provision is made for extended hours of work to such extent as may be necessary to cope with accidents and other emergencies as specified in clause (a) This follows the precedent of the existing general Conventions on hours of work But since working in successive shifts is a characteristic feature of iron and steel works, provision should also be made for the eventuality of a member of a particular shift failing — owing to some unforeseen cause such as, for example, illness, breakdown of means of communication, etc — to start work at the usual time, so that a member of some other shift has to be called upon to replace the absentee. This case is covered by clause (b) of this Article, which reproduces a provision designed to meet a similar eventuality in the Sheet-Glass Works Convention, 1934. The extension of hours must, under the terms of the Article, be limited to what is strictly necessary in the circumstances of the case

## OVERTIME

### *Article 6*

1 The competent authority may grant an allowance of overtime for exceptional cases of pressure of work Such an allowance shall only be granted under regulations made after consultation as to the necessity of such overtime and the number of hours to be worked with any organisations of employers and workers concerned, and no such allowance shall permit of any person being employed for more than one hundred hours of overtime in any year

2 In cases of urgency in which it is satisfied of the impracticability of engaging additional persons, the competent authority may, in respect of specified persons or classes of persons, grant to individual undertakings temporary permits for further overtime, so however that no such permit shall allow the employment of any person for more than sixty hours of such overtime in any year

3 Overtime authorised under this Article shall be remunerated at not less than one-and-a-quarter times the normal rate

While it is desirable to avoid overtime as far as practicable, it must be recognised that the working of overtime may occasionally be inevitable, and it is therefore necessary to make provision in the Draft Convention both to limit the amount of overtime worked and to fix the conditions upon which overtime may be resorted to Control is necessary in order to prevent the purpose of the Convention being defeated by too ready a resort to overtime, and at the same time there should be sufficient flexibility to allow for occasional extensions of hours if

necessary to meet the practical requirements of the work. It would clearly not be practicable to include detailed provisions in the international regulations, and the responsibility must therefore be placed upon the competent authority in each country, acting subject to certain general conditions. Paragraphs 1 and 2 of Article 6 lay down such general conditions.

Following a suggestion approved by a number of Governments in their replies to the Questionnaire issued in preparation for the Eighteenth Session of the Conference, it has been thought advisable to deal with the grant of overtime in two different ways. Provision is first made for an allowance of overtime to meet exceptional cases of pressure of work — for example, to make good unforeseen delays in the execution of work — which would constitute a kind of reserve upon which undertakings in general could draw in circumstances which, while they cannot always be foreseen, are nevertheless known to be not unlikely to arise. Paragraph 1 of Article 6 makes provision for this allowance. The actual amount of overtime that may be allowed is left to be determined by the competent authority, but the granting of the allowance is subject to three conditions. The competent authority must issue formal regulations, and before making the regulations it must consult any organisations of employers and workers concerned, both as to the necessity for overtime and as to the number of hours of overtime to be allowed. These two conditions provide a reasonable safeguard that overtime will be allowed only in the circumstances in which, and to the extent to which, it is really necessary. The third condition, that whatever the allowance of overtime granted, no worker may be permitted to work more than 100 hours of overtime in any year, provides a further safeguard that overtime will not be worked in circumstances that would more properly be met by an increase in the staff employed.

Circumstances may, however, arise which would not be adequately met by recourse to the ordinary general allowance of overtime, even if an allowance has been granted, and accordingly permits for special overtime for individual undertakings are provided for in paragraph 2. This provision is intended to meet urgent requirements in particular cases — for example, a shortage of a certain kind of labour, or some exceptional difficulty arising in the course of the execution of a particular job — and is subject to strict limitations. The competent authority must be satisfied that the case is urgent, and

that it is impossible to meet the need by engaging extra staff; and any permit for overtime it may decide to grant must be temporary and be granted in respect of specified persons or classes of persons engaged in the particular undertaking in question. Whatever the amount of overtime permitted, it must not be such as to entail the employment of any person affected for more than 60 hours of overtime in a year (apart from, and if necessary in addition to, any overtime that may be worked in virtue of an allowance granted in accordance with the provisions of paragraph 1). As this special overtime is designed to meet cases of urgency arising in individual undertakings, it does not seem practicable to insist upon consultation of the employers' and workers' organisations by the competent authority before the issue of a permit, though there is, of course, no reason why such consultation should not take place where circumstances permit.

Finally, as a further restraint upon unnecessary resort to overtime, and in accordance with established precedent, it is provided in paragraph 3 of this Article that all overtime, whether under a general allowance or a special permit, must be paid for at a rate at least 25 per cent. above the normal rate.

It will be seen later that in Article 8 provision is made for international supervision of the application of these overtime provisions by specifying that full information concerning the grant of overtime allowances and permits must be included in the annual reports submitted by Members upon the application of the Convention.

## ENFORCEMENT OF THE REGULATIONS

### *Article 7*

In order to facilitate the effective enforcement of the provisions of this Convention every employer shall be required

- (a) to notify, by the posting of notices in a conspicuous manner in the works or other suitable place or by such other method as may be approved by the competent authority
  - (i) the hours at which work begins and ends,
  - (ii) where work is carried on by shifts, the hours at which each shift begins and ends
  - (iii) where a rotation system is applied, a description of the system, including a time-table for each person or group of persons,
  - (iv) the arrangements made in cases where the average duration of the working week is calculated over a number of weeks; and

- (v) rest periods in so far as these are not reckoned as part of the working hours;
- (b) to keep a record in the form prescribed by the competent authority of all additional hours worked in pursuance of Article 4, 5 and 6 and of the payments made in respect thereof.

This Article makes provision, on the lines adopted in the existing Hours of Work Conventions, requiring employers to notify in sufficient detail the exact arrangements as to hours of work applicable in each undertaking or branch of an undertaking subject to the Convention, and to keep a record of all extensions of hours and overtime worked showing the extra payments made in respect thereof. Both the workers concerned and the inspecting authorities will thus be able effectively to control the enforcement of the regulations.

## INTERNATIONAL SUPERVISION

### *Article 8*

The annual reports submitted by Members upon the application of this Convention shall include more particularly full information concerning:

- (a) processes classed as necessarily continuous in character for the purpose of Article 2, paragraph 2;
- (b) arrangements of hours of work approved in virtue of Article 2, paragraph 3, or of Article 3, paragraph 3,
- (c) regulations made in virtue of Article 4; and
- (d) allowances of and temporary permits for overtime granted in virtue of Article 6

Without prejudice to the power of the Governing Body of the International Labour Office to determine the form of the annual report to be furnished by Members which have ratified the Draft Convention upon the measures taken to give effect to its provisions, it seems desirable to specify in the Draft Convention itself certain important matters upon which full information is necessary to ensure the effectiveness of the international supervision provided for by the Constitution of the Organisation. Article 8 accordingly specifies (a) the processes classed as necessarily continuous upon which an average week of 42 hours may be worked, (b) the arrangements made as regards the calculation of hours of work as an average over a period and as regards special arrangements of hours involving

higher limits than 8 hours a day and 48 hours a week; (c) the extensions of hours permitted for preparatory, complementary and intermittent work and for the completion of operations which it is technically impossible to interrupt, and (d) the use made of the power to grant allowances of overtime and temporary permits for overtime

\* \* \*

In conclusion, the Office submits at the end of this volume the following texts for the consideration of the Conference, namely

(1) A draft resolution embodying a declaration by the Conference in favour of the principle of the 40-hour week as the general international standard of hours of work, without prejudice to further reduction where circumstances permit, and of the progressive application of this principle over the whole field of employment by a series of Draft Conventions, having regard to the special circumstances of particular groups of establishments or classes of workers (cf pp 13-16);

(2) A proposed Draft Convention making specific provision for the application of this principle in the case of iron and steel works, and including a Preamble which, as explained in Part I (p 15), would be common to the series of separate Conventions and the object of which would be to integrate them into a whole on the basis of the general declaration mentioned above; and

(3) A draft resolution concerning the adjustment of wages and salaries (cf pp 17-19)

## **PROPOSED TEXTS**



# DRAFT RESOLUTION ON THE REDUCTION OF HOURS OF WORK

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Whereas unemployment has become so widespread and long-continued that there are at the present time many millions of workers throughout the world suffering hardship and privation for which they are not themselves responsible and from which they are justly entitled to be relieved;

Whereas it is desirable that workers should as far as practicable be enabled to share in the benefits of the rapid technical progress which is a characteristic of modern industry;

Whereas in pursuance of the Resolution adopted by the Eighteenth Session of the International Labour Conference it is necessary that a continuous effort should be made to reduce hours of work in all forms of employment to such extent as is possible,

The Conference therefore declares its approval of the principle of the forty-hour week as the general international standard of hours of work and as a guide for the action of the Members of the Organisation, without prejudice to further reductions of hours where circumstances permit,

The Conference will proceed, at the present and subsequent Sessions, to the consideration of a series of Draft Conventions for the progressive application of this principle to the whole field of employment, having regard to the special circumstances of particular groups of establishments or classes of workers

The Conference accordingly decides to refer to a Committee for consideration the Reports prepared by the International Labour Office on the application of the reduction of hours of work to

- (a) public works undertaken or subsidised by Governments;
  - (b) iron and steel,
  - (c) building and contracting,
  - (d) glass bottle manufacture;
  - (e) coal mines
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# PROJET DE RÉSOLUTION CONCERNANT LA RÉDUCTION DE LA DURÉE DU TRAVAIL

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Considérant que le chômage a pris des proportions tellement étendues et sévit depuis si longtemps qu'il y a actuellement dans le monde des millions de travailleurs en butte à la misère et à des privations dont ils ne sont pas eux-mêmes responsables et dont ils ont légitimement le droit d'être soulagés;

Considérant qu'il serait désirable que les travailleurs soient mis, dans la mesure du possible, à même de participer au bénéfice des progrès techniques dont le développement rapide caractérise l'industrie moderne;

Considérant que, pour donner suite à la résolution adoptée par la dix-huitième session de la Conférence internationale du Travail, il est indispensable de tenter un effort continu afin de réduire le plus possible la durée du travail dans toutes les catégories d'emploi;

La Conférence se déclare en faveur du principe de la semaine de quarante heures comme limite internationale générale de la durée du travail, et comme directive pour les Membres de l'Organisation, sans préjudice des nouvelles réductions que les circonstances pourraient permettre;

Et elle procédera, à la session actuelle et aux sessions suivantes, à l'examen d'une série de projets de convention destinés à assurer l'application progressive de ce principe à l'ensemble de l'activité économique, en tenant compte des conditions particulières à des groupes d'établissements ou à des catégories de travailleurs déterminés

La Conférence décide en conséquence de renvoyer à l'examen d'une commission les rapports préparés par le Bureau international du Travail sur l'application de la réduction de la durée du travail.

- a) aux travaux publics entrepris par les gouvernements ou subventionnés par eux;
  - b) au fer et à l'acier;
  - c) au bâtiment et au génie civil;
  - d) au verre à bouteilles;
  - e) aux mines de charbon.
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# PROPOSED DRAFT CONVENTION CONCERNING HOURS OF WORK IN IRON AND STEEL WORKS

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The International Labour Conference,

Having met at Geneva in its Nineteenth Session on 4 June 1935,

Considering that the question of the reduction of hours of work appears on the Agenda of the Session,

Having adopted on June 1935 a resolution declaring its approval of the principle of the forty-hour week as the general international standard of hours of work, and

Having determined to give effect to this reduction forthwith in the case of iron and steel works,

adopts, this day of June 1935, the following Draft Convention

## ARTICLE 1

1 This Convention applies to persons employed in any undertaking or branch thereof engaged wholly or mainly in any one or more of the following operations.

- (a) the conversion of ore into pig-iron,
- (b) the conversion of pig-iron into iron or steel,
- (c) the rolling or heavy forging of iron or steel

2 The competent authority in each country shall define the line which separates such undertakings or branches from undertakings or branches engaged in related operations

3. The competent authority in each country may exempt from the application of this Convention:

- (a) persons occupying a position of supervision or management who do not ordinarily perform manual work;
- (b) persons employed in a confidential capacity

## ARTICLE 2

1 The hours of work of persons to whom this Convention applies shall not exceed an average of forty per week

# AVANT-PROJET DE CONVENTION CONCERNANT LA DURÉE DU TRAVAIL DANS L'INDUSTRIE DU FER ET DE L'ACIER

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La Conférence internationale du Travail,

S'étant réunie à Genève le 4 juin 1935 en sa dix-neuvième session,

Considérant que la question de la réduction de la durée du travail figure à l'ordre du jour de la session,

Ayant adopté le      juin 1935 une résolution en faveur du principe de la semaine de quarante heures comme limite internationale générale de la durée du travail,

Décidée à réaliser des maintenant cette réduction en ce qui concerne le fer et l'acier,

adopte, ce      jour de juin 1935, le projet de convention ci-après.

## ARTICLE PREMIER

1 La présente convention s'applique aux personnes employées dans les établissements ou branches d'établissements dont l'activité porte exclusivement ou principalement sur une ou plusieurs des opérations suivantes:

- a) transformation du minerai en fonte;
- b) transformation de la fonte en fer ou en acier;
- c) laminage ou gros forgeage du fer ou de l'acier.

2. Dans chaque pays, l'autorité compétente déterminera la ligne de démarcation entre de tels établissements ou branches d'établissements et les autres établissements ou branches d'établissements occupés dans des opérations connexes.

3. Dans chaque pays, l'autorité compétente peut exempter de l'application de la présente convention:

- a) les personnes occupant un poste de surveillance ou de direction et ne participant normalement à aucun travail manuel;
- b) les personnes occupant un poste de confiance.

## ARTICLE 2

1. La durée du travail des personnes auxquelles s'applique la présente convention ne doit pas dépasser en moyenne quarante heures par semaine

2 In the case of persons who work in successive shifts at processes required by reason of the nature of the process to be carried on without a break at any time of the day, night or week, weekly hours of work may average forty-two

3. Where hours of work are calculated as an average, the competent authority shall, after consultation with the organisations of employers and workers concerned where such exist, determine the number of weeks over which this average may be calculated

4. For the purpose of this Convention, the term "hours of work" means the time during which the persons employed are at the disposal of the employer and does not include rest periods during which they are not at his disposal.

### ARTICLE 3

1 No arrangement of hours of work made under the provisions of Article 2, paragraph 1, shall allow of any person working for more than eight hours in any one day or forty-eight hours in any one week:

2. Provided that, subject to the forty-eight hour weekly limit, the daily limit may, by the sanction of the competent authority or by agreement between employers' and workers' representatives, be increased to nine hours:

3 Provided also that the limits of eight and forty-eight hours may be exceeded in exceptional cases in which the competent authority, after consultation with the employers' and workers' organisations concerned where such exist, approves an arrangement of hours involving higher limits

### ARTICLE 4

1. The competent authority may by regulation provide that the limits of hours prescribed in the preceding Articles may be exceeded:

(a) in the case of persons employed on preparatory or complementary work which must necessarily be carried on outside the limits laid down for the general working of the undertaking, branch or shift;

(b) in the case of persons employed in occupations which by their nature involve long periods of inaction during which the said persons have to display neither physical activity nor sustained attention or remain at their posts only to reply to possible calls;

2. Pour les personnes qui travaillent par équipes successives à des travaux dont le fonctionnement continu doit, en raison même de la nature du travail, être assuré sans interruption à aucun moment du jour, de la nuit et de la semaine, la durée hebdomadaire moyenne du travail peut atteindre quarante-deux heures

3 Quand la durée du travail est calculée d'après une durée moyenne, l'autorité compétente doit, après consultation des organisations d'employeurs et de travailleurs intéressés, s'il en existe, fixer le nombre de semaines sur lequel cette durée moyenne peut être calculée

4 Aux fins de la présente convention, l'expression « durée du travail » signifie le temps pendant lequel le personnel est à la disposition de l'employeur, et ne comprend pas les repos pendant lesquels il n'est pas à sa disposition

### ARTICLE 3

1 Aucune répartition des heures de travail faite en vertu des dispositions de l'article 2, paragraphe 1, ne peut autoriser une personne à travailler plus de huit heures par jour ni plus de quarante-huit heures par semaine

2 Toutefois, sous réserve de la limite hebdomadaire de quarante-huit heures, la limite journalière peut être portée à neuf heures par décision de l'autorité compétente ou par accord entre les représentants des employeurs et des travailleurs

3 En outre, les limites de huit heures par jour et quarante-huit heures par semaine peuvent être dépassées dans des cas exceptionnels où l'autorité compétente approuve, après consultation des organisations d'employeurs et de travailleurs intéressés, s'il en existe, une répartition comportant des limites plus élevées

### ARTICLE 4

1 L'autorité compétente peut, par des règlements, permettre de dépasser la limite des heures de travail fixée aux articles précédents

- a) dans le cas de personnes employées à des travaux préparatoires ou complémentaires qui doivent être nécessairement exécutés en dehors de la limite assignée au travail général de l'établissement, de la branche d'établissement ou de l'équipe,
- b) dans le cas de personnes employées à des occupations qui, par leur nature, comportent de longues périodes d'inaction pendant lesquelles ces personnes n'ont à déployer ni activité matérielle ni attention soutenue, ou ne restent à leur poste que pour répondre à des appels éventuels;

- (c) in cases where the continued employment of certain persons is necessary for the completion of an operation which it is technically impossible to interrupt

2 The regulations referred to in paragraph 1 shall determine the maximum number of hours which may be worked in virtue of this Article.

#### ARTICLE 5

The limits of hours prescribed in the preceding Articles may be exceeded, but only so far as may be necessary to avoid serious interference with the ordinary working of the undertaking,

- (a) in case of accident, actual or threatened, or in case of urgent work to be done to machinery or plant, or in case of *force majeure*; or
- (b) in order to make good the unforeseen absence of one or more members of a shift.

#### ARTICLE 6

1 The competent authority may grant an allowance of overtime for exceptional cases of pressure of work. Such an allowance shall only be granted under regulations made after consultation as to the necessity of such overtime and the number of hours to be worked with any organisations of employers and workers concerned, and no such allowance shall permit of any person being employed for more than one hundred hours of overtime in any year.

2 In cases of urgency in which it is satisfied of the impracticability of engaging additional persons, the competent authority may, in respect of specified persons or classes of persons, grant to individual undertakings temporary permits for further overtime, so however that no such permit shall allow the employment of any person for more than sixty hours of such overtime in any year.

3. Overtime authorised under this Article shall be remunerated at not less than one-and-a-quarter times the normal rate

#### ARTICLE 7

In order to facilitate the effective enforcement of the provisions of this Convention every employer shall be required.

- (a) to notify, by the posting of notices in a conspicuous manner in the works or other suitable place or by

- c) dans le cas où la prolongation du travail de certaines personnes est nécessaire pour l'achèvement d'une opération dont l'interruption est techniquement impossible.

2. Les règlements prévus au paragraphe 1 doivent déterminer le nombre maximum d'heures de travail qui peuvent être effectuées en vertu du présent article.

#### ARTICLE 5

Les limites des heures de travail prévues aux articles précédents peuvent être dépassées, mais uniquement dans la mesure nécessaire pour éviter qu'une gêne sérieuse ne soit apportée à la marche normale de l'établissement:

- a) en cas d'accident survenu ou imminent, ou en cas de travaux d'urgence à effectuer aux machines ou à l'outillage, ou en cas de force majeure;
- b) pour faire face à l'absence imprévue d'une ou plusieurs personnes d'une équipe.

#### ARTICLE 6

1. L'autorité compétente peut attribuer un contingent d'heures supplémentaires pour faire face à des surcroîts de travail extraordinaires. Ce contingent ne peut être attribué qu'en vertu de règlements édictés après consultation des organisations d'employeurs et de travailleurs intéressés, s'il en existe, sur la nécessité de ces heures supplémentaires et sur leur nombre. Le maximum des heures ainsi accordées ne doit pas permettre qu'une personne soit employée plus de cent heures supplémentaires par an.

2. En outre, dans des cas d'urgence où elle est fondée à considérer comme impossible l'embauchage de nouvelles personnes, l'autorité compétente peut accorder à des établissements déterminés, pour des personnes ou des groupes de personnes désignés, des autorisations temporaires d'heures supplémentaires, sous réserve qu'une autorisation ainsi accordée n'entraîne pas l'emploi d'une personne pendant plus de soixante heures de travail supplémentaires au cours d'une année.

3. Les heures supplémentaires effectuées en vertu des dispositions du présent article seront rémunérées à un taux majoré d'au moins vingt-cinq pour cent par rapport au salaire normal

#### ARTICLE 7

En vue de faciliter l'application des dispositions de la présente convention, chaque employeur doit.

- a) faire connaître au moyen d'affiches apposées d'une manière apparente dans l'établissement ou dans tout



such other method as may be approved by the competent authority.

- (i) the hours at which work begins and ends;
  - (ii) where work is carried on by shifts, the hours at which each shift begins and ends,
  - (iii) where a rotation system is applied, a description of the system, including a time-table for each person or group of persons;
  - (iv) the arrangements made in cases where the average duration of the working week is calculated over a number of weeks; and
  - (v) rest periods in so far as these are not reckoned as part of the working hours;
- (b) to keep a record in the form prescribed by the competent authority of all additional hours worked in pursuance of Articles 4, 5 and 6 and of the payments made in respect thereof

#### ARTICLE 8

The annual reports submitted by Members upon the application of this Convention shall include more particularly full information concerning

- (a) processes classed as necessarily continuous in character for the purpose of Article 2, paragraph 2,
  - (b) arrangements of hours of work approved in virtue of Article 2, paragraph 3, or of Article 3, paragraph 3,
  - (c) regulations made in virtue of Article 4, and
  - (d) allowances of and temporary permits for overtime granted in virtue of Article 6
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autre lieu convenable ou selon tout autre mode approuvé par l'autorité compétente:

- i) les heures auxquelles commence et finit le travail;
  - ii) si le travail s'effectue par équipes, les heures auxquelles commence et finit le tour de chaque équipe;
  - iii) s'il est fait application d'un système de roulement, une description de ce système, y compris un horaire de travail pour chaque personne ou groupe de personnes;
  - iv) les dispositions prises dans les cas où la durée hebdomadaire moyenne du travail est calculée sur plusieurs semaines;
  - v) les repos dans la mesure où ils ne sont pas considérés comme faisant partie des heures de travail.
- b) inscrire sur un registre, selon le mode approuvé par l'autorité compétente, toutes les prolongations de la durée du travail qui ont eu lieu en vertu des articles 4, 5 et 6 ainsi que le montant de leur rétribution

#### ARTICLE 8

Les rapports annuels soumis par les Membres sur l'application de la présente convention doivent comprendre des renseignements complets concernant notamment:

- a) les travaux considérés comme étant, par leur nature, à fonctionnement nécessairement continu, aux fins de l'article 2, paragraphe 2,
  - b) les répartitions des heures de travail approuvées en vertu de l'article 2, paragraphe 3, ou en vertu de l'article 3, paragraphe 3;
  - c) les règlements établis conformément aux dispositions de l'article 4;
  - d) les contingents et autorisations d'heures supplémentaires accordés en vertu de l'article 6.
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## DRAFT RESOLUTION ON THE ADJUSTMENT OF WAGES AND SALARIES

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The Conference,

Having adopted a Resolution declaring its approval of the principle of the forty-hour week,

Considering that the application of this principle should not result in lowering the standard of living of the workers,

Invites Governments to take appropriate measures in order to ensure.

- (1) that any adjustment of wages and salaries should be effected as far as possible by means of direct negotiations between the employers' and workers' organisations concerned; and
  - (2) that if agreement between the parties concerned cannot be reached, it should be possible for either of the parties concerned to submit the dispute to bodies competent to deal with wage questions, and further, that where no such bodies exist, they should be set up
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# PROJET DE RÉOLUTION CONCERNANT L'ADAPTATION DES SALAIRES ET TRAITEMENTS

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La Conférence,

Ayant adopté une résolution déclarant approuver le principe de la semaine de quarante heures,

Considérant que l'application de ce principe ne devrait pas avoir pour conséquence une réduction du niveau de vie des travailleurs,

Invite les gouvernements à prendre les dispositions appropriées

- 1) pour que toute adaptation des salaires et des traitements se fasse dans la plus large mesure possible par voie de négociations directes entre les organisations patronales et ouvrières intéressées, et
  - 2) pour que, si un accord entre les parties intéressées se révèle impossible, le différend puisse être porté, par l'une ou l'autre des parties intéressées, devant des organismes habilités pour traiter les questions de salaires et pour que, lorsqu'ils n'existent pas, de tels organismes soient institués
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